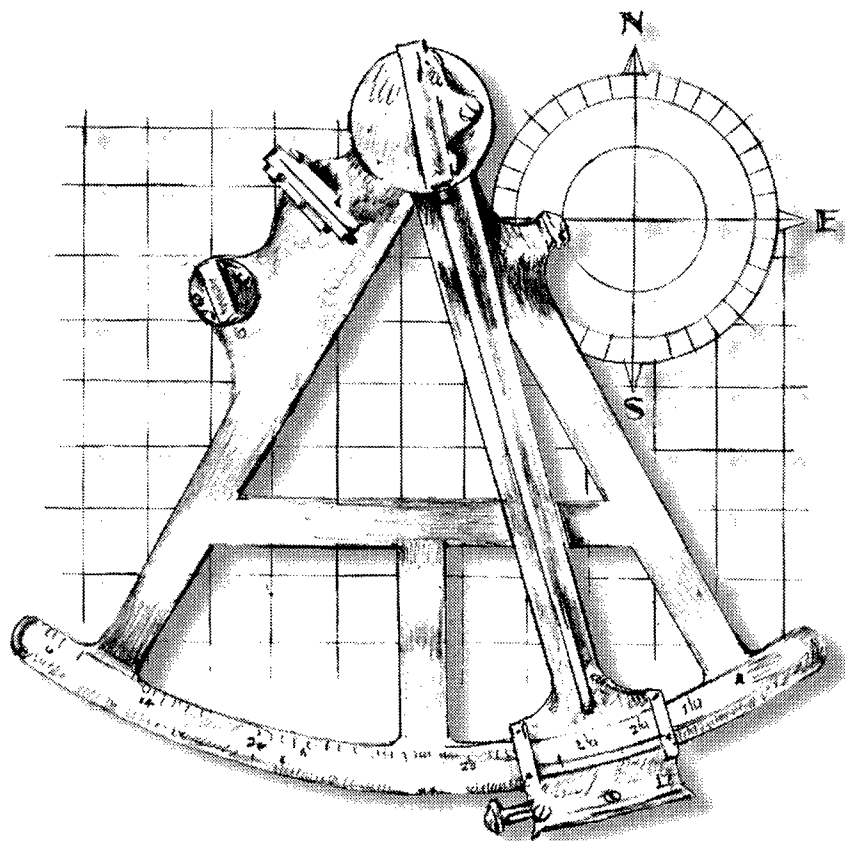


The Economic and Budget Outlook: Fiscal Years 1999-2008

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A REPORT TO THE SENATE AND
HOUSE COMMITTEES ON THE BUDGET

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**THE ECONOMIC AND BUDGET OUTLOOK:
FISCAL YEARS 1999-2008**

The Congress of the United States
Congressional Budget Office

NOTES

Unless otherwise indicated, all years referred to in Chapter 1 and Appendix H are calendar years and all years in Chapters 2 through 4 and all other appendixes are fiscal years.

Some figures in this report indicate periods of recession by using shaded vertical bars. The bars extend from the peak to the trough of the recession.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force.

Numbers in the text and tables of this report may not add to totals because of rounding.

National income and product account (NIPA) data shown in the tables do not incorporate the revised data for the third quarter of 1997 that were released on December 23, 1997.

Preface

This volume is one of a series of reports on the state of the economy and the budget that the Congressional Budget Office (CBO) issues each year. It satisfies the requirement of section 202(e) of the Congressional Budget Act of 1974 for CBO to submit periodic reports to the Committees on the Budget with respect to fiscal policy and to provide five-year baseline projections of the federal budget. In accordance with CBO's mandate to provide objective and impartial analysis, the report contains no recommendations.

The analysis of the economic outlook presented in Chapter 1 was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis and John F. Peterson. Edward Gamber wrote the chapter, with substantial contributions from Robert Arnold, Juann Hung, and Frank Russek. John F. Peterson, Matthew Salomon, and Robert Arnold carried out the economic forecast and projections. Douglas Hamilton, Juann Hung, Kim Kowalewski, Joyce Manchester, Angelo Mascaro, Benjamin Page, Frank Russek, Kent Smetters, John Sturrock, Jan Walliser, and Christopher Williams provided comments and background analysis. Paul Diller, Timothy Lasocki, and Michael Simpson provided research assistance.

The baseline outlay projections were prepared by the staff of the Budget Analysis Division under the supervision of Paul N. Van de Water, Robert Sunshine, Priscilla Aycock, Paul Cullinan, Peter Fontaine, James Horney, Michael Miller, and Murray Ross. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Rosemary D. Marcuss and Richard Kasten. Jeffrey Holland wrote Chapters 2 and 4, with contributions by Paul Cullinan on Chapter 4. Rosemary D. Marcuss and Richard Kasten wrote Chapter 3. Daniel Kowalski wrote Appendix A; Stephanie Weiner wrote Appendixes B, C, and E; Jennifer Winkler wrote Appendix D; Jeffrey Lemieux wrote Appendixes F and H; and Jeanne De Sa wrote Appendix G. Jennifer Smith coordinated the revision of the glossary. James Horney wrote the summary of the report.

An early version of the economic forecast underlying this report was discussed at a meeting of CBO's Panel of Economic Advisers. Members of the panel are Robert Barro, Michael Boskin, Barry P. Bosworth, Robert Dederick, Rudiger Dornbusch, Martin Feldstein, Robert J. Gordon, Lyle E. Gramley, Robert E. Hall, Marvin Kusters, Anne Krueger, N. Gregory Mankiw, Allan Meltzer, Rudolph Penner, James Poterba, Robert Reischauer, Sherwin Rosen, Joel Slemrod, John Taylor, and James Tobin. William Dudley, Mickey Levy, Zia Qureshi, and Robert J. Shiller attended as guests. Although these outside advisers provided considerable assistance, CBO is solely responsible for the accuracy of the analyses in this report.

Sherry Snyder supervised the editing of the report, and Kathryn Quattrone supervised production. Major portions were edited by Sherry Snyder, Melissa Burman, Leah Mazade, and Christian Spoor. The authors owe thanks to Marion Curry, Linda Lewis Harris, Kishana Highgate, Denise Jordan, Dorothy Kornegay, and Simone Thomas, who assisted in the preparation of the report. Kathryn Quattrone prepared the report for final publication, with assistance from Sharon Corbin-Jallow and Martina Wojak-Piotrow.

June E. O'Neill
Director

January 1998

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Summary

The latest estimates by the Congressional Budget Office (CBO) indicate that the federal budget is likely to be essentially balanced for the next 10 years if current policies remain unchanged. CBO now projects single-digit deficits for fiscal years 1998, 1999, and 2000, followed by a small surplus in 2001 and growing surpluses through 2008. Continued good news about the economy and other factors that affect revenues and spending is responsible for the further improvement in the budget outlook since CBO's last baseline report in September 1997.

With total revenues and total spending each approaching \$1.7 trillion, small percentage deviations from the amounts projected in the baseline can swing budgetary outcomes by tens of billions of dollars. Because projected revenues and spending are so close in 1998 through 2001, such small deviations could easily produce surpluses (or larger deficits) in 1998 through 2000, or a deficit (or a larger surplus) in 2001, without any change in budget policies or a dramatic change in the performance of the economy.

Recent experience has vividly demonstrated the difficulty of accurately projecting federal revenues and spending, even for the current fiscal year. For example, in projections released last winter when the fiscal year was already one-fourth over, both CBO and the Office of Management and Budget overestimated the 1997 deficit by more than \$100 billion. Large estimating errors are not uncommon for the federal government's complex budget, which is greatly affected by the economy and numerous other factors that are difficult to predict.

Because of the volatility of federal spending and revenues, policymakers should always be cautious about depending too much on specific budget projections for any given year. In addition, as CBO pointed out in September, there are three reasons to be cautious about the current bright outlook for the next 10 years.

First, the economic and other assumptions underlying CBO's baseline could prove to be too optimistic. For several years, the economy has performed better than CBO and other forecasters have projected, and budget outcomes have been more favorable than anticipated. The next few years, however, could mirror the early 1990s, a period in which the economic and budget outlook consistently deteriorated. For instance, if a recession similar to the one that struck in 1990 was to begin next year or the year after, the nearly balanced budgets anticipated for the next few years could turn into \$100 billion deficits.

Second, CBO's baseline projections assume that the Congress and the President will comply with the statutory caps on discretionary spending, which will require holding appropriations in 2002 to a level about 10 percent below that needed to keep pace with anticipated inflation between now and 2002. Between 1990 and 1997, total discretionary spending was reduced by 12 percent in real terms, with real increases in nondefense appropriations offset by substantial cuts in defense spending—cuts that seem unlikely to be repeated in the coming years. For 1998, however, the caps allowed total appropriations nearly to keep up with inflation, effectively delaying the tough decisions on discretionary spending envisioned by last year's budget deal.

Third, a problem still looms beyond the 10-year horizon because of the retirement of the baby-boom population and the continued growth expected in per-beneficiary costs of federal health programs for the elderly. Legislation to constrain Social Security and Medicare spending to sustainable levels is required to prevent spiraling deficits in the next century.

The Economic Outlook

The economy continued to surprise observers with an impressive performance in 1997. Real gross domestic product (GDP) increased at the highest rate since 1988, unemployment fell to a 24-year low, and inflation dropped to levels last seen in the 1960s. Such a performance cannot be sustained indefinitely. In fact, CBO forecasts slower, but still robust, economic growth and higher inflation over the next two years but does not foresee a recession in the near future. The currency devaluations and the turmoil in the financial markets in Asia will contribute to the slowing of the U.S. economy this year and help prevent it from overheating. A significant worsening of the Asian crisis, however, could spread worldwide and slow economic growth in the United States more precipitously than CBO currently expects.

Changes Since September

CBO still believes that the growth of real GDP will be slower in calendar year 1998 than in 1997, although the 2.7 percent growth rate forecast for 1998 is 0.6 percentage points higher than was forecast last September (see Summary Table 1).¹ The higher near-term growth rate and an associated reduction in the forecast unemployment rate result from new data that indicate the economy grew faster in 1997 than had been anticipated and is not cooling as quickly as CBO expected. Because CBO has not significantly revised its estimate of the long-term potential of the economy, growth of real GDP is now projected to be slightly slower after 1999

than was assumed in September, leaving real GDP in 2007 at about the same level as CBO projected in September.

CBO also has lowered its forecast of inflation in 1998 from 2.7 percent to 2.2 percent (as measured by the consumer price index). Unlike real GDP, however, the change in the short-term forecast is not offset in later years—inflation is assumed to be lower in every year than was projected in September. As a result, although real GDP in 2007 is currently projected to be almost equal to the amount projected in September, nominal GDP projected for that year is more than \$300 billion lower.

Both short-term and long-term interest rates for 1998 are slightly lower in the current forecast than in September's, but rates are higher in 1999 and succeeding years. (After 2000, the increase is 0.3 percentage points for three-month Treasury bills and 0.2 percentage points for 10-year Treasury notes.) The new forecast also assumes that both corporate profits and wages and salaries will represent a larger share of GDP than was previously expected. The increase in the corporate profit share, which stems largely from the economy's surprisingly strong recent performance, is significant in 1998 (0.6 percentage points) but fades almost completely by the end of the projection period. The increase in the wages and salaries share, which stems from lower projected growth in nonwage compensation, is smaller in 1998 (0.2 percentage points) but grows slightly in succeeding years.

Current Economic Forecast and Projections

CBO expects that the recent rapid growth of the economy will ease over the next two years and that inflation will increase slightly. After growing at the healthy rate of 2.8 percent in 1996, real GDP rose an estimated 3.7 percent in 1997. The unemployment rate dropped to an average of 4.9 percent for the year. Despite low unemployment and high output, which CBO estimates exceeded its potential (the amount that can be produced without accelerating inflation), the rate of inflation as measured by the consumer price index (CPI) fell from 2.9 percent in 1996 to 2.4 percent in 1997. In part, the low inflation rate is the result of changes in the way the

1. See Congressional Budget Office, *The Economic and Budget Outlook: An Update* (September 1997).

Summary Table 1.
Comparison of CBO Economic Projections, Calendar Years 1998-2008

	Estimate ^a 1997	Forecast		Projected								
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nominal GDP												
(Billions of dollars)												
January 1998	8,081	8,461	8,818	9,195	9,605	10,046	10,529	11,038	11,565	12,112	12,684	13,280
September 1997	8,053	8,415	8,802	9,223	9,672	10,165	10,684	11,227	11,794	12,388	13,011	n.a.
Nominal GDP												
(Percentage change)												
January 1998	5.8	4.7	4.2	4.3	4.5	4.6	4.8	4.8	4.8	4.7	4.7	4.7
September 1997	5.5	4.5	4.6	4.8	4.9	5.1	5.1	5.1	5.1	5.0	5.0	n.a.
Real GDP												
(Percentage change)												
January 1998	3.7	2.7	2.0	1.9	2.0	2.1	2.3	2.3	2.2	2.2	2.2	2.1
September 1997	3.4	2.1	1.9	2.1	2.2	2.4	2.4	2.4	2.3	2.3	2.3	n.a.
Implicit GDP Deflator												
(Percentage change)												
January 1998	2.0	2.0	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
September 1997	2.0	2.4	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	n.a.
Consumer Price Index^b												
(Percentage change)												
January 1998	2.4	2.2	2.5	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
September 1997	2.4	2.7	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	n.a.
Unemployment Rate												
(Percent)												
January 1998	4.9	4.8	5.1	5.4	5.6	5.8	5.9	5.9	5.9	5.9	5.9	5.9
September 1997	5.0	5.1	5.5	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	n.a.
Three-Month Treasury												
Bill Rate (Percent)												
January 1998	5.1	5.3	5.2	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
September 1997	5.2	5.4	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	n.a.
Ten-Year Treasury												
Note Rate (Percent)												
January 1998	6.4	6.0	6.1	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
September 1997	6.4	6.2	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	n.a.
Tax Bases												
(Percentage of GDP)												
Corporate profits												
January 1998	9.9	9.7	9.2	8.8	8.5	8.3	8.2	8.1	8.0	7.9	7.8	7.7
September 1997	9.5	9.1	8.8	8.6	8.3	8.1	8.0	7.9	7.8	7.7	7.7	n.a.
Wages and salaries												
January 1998	48.0	48.4	48.5	48.6	48.6	48.6	48.6	48.7	48.8	48.8	48.8	48.8
September 1997	48.0	48.2	48.2	48.2	48.2	48.2	48.3	48.3	48.3	48.3	48.4	n.a.

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board; Department of Labor, Bureau of Labor Statistics.

NOTES: Percentage change is year over year. n.a. = not applicable.

a. Estimates of nominal GDP, real GDP, and the implicit GDP deflator are based on data for the first three quarters of 1997 published November 26, 1997.

b. The consumer price index for all urban consumers.

Summary Table 2.
CBO Budget Projections (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Revenues												
Individual income	737	768	782	805	840	886	922	974	1,027	1,083	1,143	1,207
Corporate income	182	197	200	200	200	203	209	216	224	232	241	250
Social insurance	539	573	600	625	651	679	710	743	781	817	856	892
Other	<u>120</u>	<u>127</u>	<u>147</u>	<u>149</u>	<u>155</u>	<u>162</u>	<u>167</u>	<u>173</u>	<u>177</u>	<u>181</u>	<u>187</u>	<u>191</u>
Total	1,579	1,665	1,729	1,779	1,847	1,930	2,008	2,105	2,208	2,314	2,426	2,540
Outlays												
Discretionary ^a	549	557	561	565	564	560	576	592	609	626	643	661
Mandatory												
Social Security	362	376	391	409	428	449	471	495	522	551	582	614
Medicare	208	218	231	244	268	277	306	330	367	377	417	448
Medicaid	96	101	108	115	123	131	141	152	165	179	194	210
Other	<u>229</u>	<u>256</u>	<u>272</u>	<u>290</u>	<u>303</u>	<u>316</u>	<u>330</u>	<u>342</u>	<u>360</u>	<u>369</u>	<u>378</u>	<u>399</u>
Subtotal	895	950	1,003	1,058	1,121	1,173	1,247	1,320	1,415	1,476	1,570	1,672
Net interest	244	244	248	244	238	231	226	222	216	209	202	194
Offsetting receipts	<u>-86</u>	<u>-81</u>	<u>-81</u>	<u>-84</u>	<u>-90</u>	<u>-104</u>	<u>-96</u>	<u>-100</u>	<u>-106</u>	<u>-112</u>	<u>-119</u>	<u>-126</u>
Total	1,601	1,670	1,731	1,782	1,833	1,860	1,954	2,034	2,133	2,199	2,297	2,403
Deficit (-) or Surplus	-22	-5	-2	-3	14	69	54	71	75	115	129	138
Memorandum:												
On-budget Deficit (-) or Surplus	-103	-105	-115	-125	-116	-69	-94	-87	-95	-64	-60	-60
Debt Held by the Public	3,771	3,790	3,806	3,821	3,821	3,765	3,725	3,668	3,606	3,503	3,386	3,259
As a Percentage of Gross Domestic Product												
Revenues												
Individual income	9.3	9.2	9.0	8.8	8.8	8.9	8.9	8.9	9.0	9.0	9.1	9.2
Corporate income	2.3	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9
Social insurance	6.8	6.8	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Other	<u>1.5</u>	<u>1.5</u>	<u>1.7</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>	<u>1.5</u>
Total	19.8	19.9	19.8	19.6	19.4	19.4	19.3	19.3	19.3	19.3	19.3	19.3
Outlays												
Discretionary ^a	6.9	6.7	6.4	6.2	5.9	5.6	5.5	5.4	5.3	5.2	5.1	5.0
Mandatory												
Social Security	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.6	4.7
Medicare	2.6	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.2	3.1	3.3	3.4
Medicaid	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
Other	<u>2.9</u>	<u>3.1</u>	<u>3.1</u>	<u>3.2</u>	<u>3.2</u>	<u>3.2</u>	<u>3.2</u>	<u>3.1</u>	<u>3.2</u>	<u>3.1</u>	<u>3.0</u>	<u>3.0</u>
Subtotal	11.2	11.3	11.5	11.6	11.8	11.8	12.0	12.1	12.4	12.3	12.5	12.7
Net interest	3.1	2.9	2.8	2.7	2.5	2.3	2.2	2.0	1.9	1.7	1.6	1.5
Offsetting receipts	<u>-1.1</u>	<u>-1.0</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-1.0</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-0.9</u>	<u>-1.0</u>
Total	20.1	20.0	19.8	19.6	19.3	18.7	18.8	18.6	18.7	18.4	18.3	18.3
Deficit (-) or Surplus	-0.3	-0.1	b	b	0.1	0.7	0.5	0.7	0.7	1.0	1.0	1.0
Memorandum:												
On-budget Deficit (-) or Surplus	-1.3	-1.3	-1.3	-1.4	-1.2	-0.7	-0.9	-0.8	-0.8	-0.5	-0.5	-0.5
Debt Held by the Public	47.3	45.3	43.6	42.0	40.2	37.9	35.8	33.6	31.5	29.3	27.0	24.8

SOURCE: Congressional Budget Office.

- a. The baseline assumes that discretionary spending will equal the statutory caps on discretionary spending in 1999 through 2002 and will increase at the rate of inflation in succeeding years.
- b. Less than 0.05 percent.

CPI is measured. In addition, CBO believes that factors such as falling import prices have masked the inflationary pressures that have built up over the past two years. CBO expects that inflation will begin to increase during 1998, although import prices and additional changes in CPI measurement will continue to have a moderating effect.

The rise in inflation, together with low unemployment, is expected to lead to slightly tighter monetary policy in 1998. Along with the effect of the Asian financial crisis on U.S. exports, an increase of 0.2 percentage points in short-term interest rates is expected to slow economic growth to a sustainable pace by early 1999.

CBO does not forecast cyclical economic effects beyond two years. Instead, it calculates a range of estimates for the long-run path of the economy that reflect the possibility of booms and recessions. CBO then presents the middle of that range as its baseline projection of the economy for 2000 through 2008. Over that period, CBO expects real GDP growth to average 2.2 percent a year, the CPI to grow at an average rate of 2.8 percent a year, and the unemployment rate to average 5.9 percent after 2002. Short-term interest rates are expected to reach an average level of 4.7 percent after 2000; long-term interest rates are already close to their expected average of 5.9 percent.

Uncertainty of the Outlook

The economy, of course, is highly unlikely to develop precisely as the forecast predicts. In the near term, the economy could be seriously affected by a worsening of the Asian crisis or by other circumstances such as a burst of inflation followed by a swift tightening of monetary policy. Alternatively, the economy could once again surprise most observers and continue to grow for a few more years at a robust rate with low inflation. Such unanticipated cyclical fluctuations could have a substantial impact on the budget in the next few years, easily swinging the fiscal bottom line by \$100 billion or more in a single year. Divergences from the projected long-term trends are not likely to be dramatic, but small permanent changes compound over time and can have even larger effects on the budget.

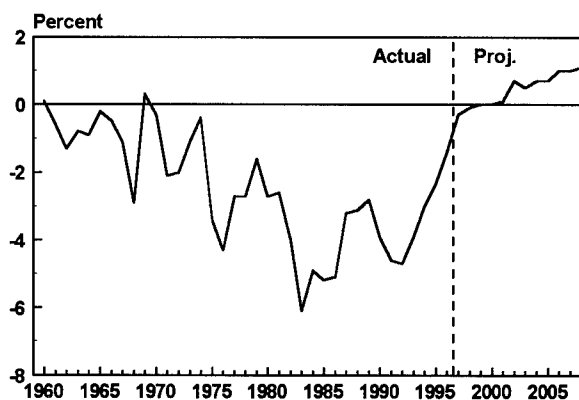
The Budget Outlook

Continued strong economic growth in the absence of inflation, along with a slowing in the growth of spending for a number of federal benefit programs, has further improved CBO's budget projections since September 1997. Under current laws, deficits in the next few years are now projected to be less than 0.1 percent of GDP, followed by surpluses that eventually reach 1 percent of GDP (see Summary Table 2). Such outcomes would represent a significant improvement over the deficits that have prevailed for almost three decades (see Summary Figure 1).

Changes Since September

The Balanced Budget and Taxpayer Relief Acts of 1997 had a significant impact on projected outlays and revenues, but those effects were already included in CBO's September baseline. Legislative actions taken since September make only a tiny contribution to the improvement of \$40 billion to \$50 billion a year in the budget outlook over the next 10 years (see Summary Table 3). Over the next three years, changes in CBO's economic projections—primarily stronger real growth in GDP—contribute nearly half of the total budgetary improvement. Increased revenues account for three-

Summary Figure 1.
Deficit (-) or Surplus as a Share of Gross Domestic Product (By fiscal year)



SOURCE: Congressional Budget Office.

quarters of that economic improvement. In the longer run, the main change in the economic projections is lower inflation, but that change has little effect on the budget's bottom line because it pushes down both revenues and outlays.

The remaining changes in the budget projections stem from factors not directly attributable to either new laws or changes in CBO's economic projections (which are limited to variables included in the national income and product accounts). CBO labels changes resulting from such factors technical changes, although some of them could be considered economic in nature even though they are not part of CBO's economic projections. In the case of revenues, technical changes reflect increases or decreases that exceed those accounted for by changes in aggregate incomes included in the national income and product accounts (NIPAs). For example, spurred by factors such as high capital gains, individual income tax receipts grew by 12 percent in 1997, much faster than the increase in aggregate incomes. The bulk of the technical changes in CBO's projections resulting from that excess growth of revenues in 1997 were already incorporated in the Septem-

ber baseline. Additional technical increases since September reflect the assumption that income tax receipts will continue to grow relative to incomes, although that effect fades over time. Projected outlays are down for a variety of reasons, but the most important are the unexpectedly slow recent growth of the Medicaid program and a slower rate of increase in the number of people expected to receive benefits from some federal entitlement programs.

Current Budget Projections

CBO's new baseline projections point to a decline in total outlays relative to the size of the economy—from 20.1 percent of GDP in 1997 to 18.3 percent in 2008. The projected level for 2008 would be substantially below the norm for the past 30 years (see Summary Figure 2). Revenues are projected to decline modestly as a share of GDP over the same period, from 19.8 percent in 1997 to 19.3 percent in 2008. But even at the lower level projected for 2008, revenues as a share of GDP would be high in historical terms.

Summary Table 3.
Changes in CBO Budget Projections Since September 1997 (By fiscal year)

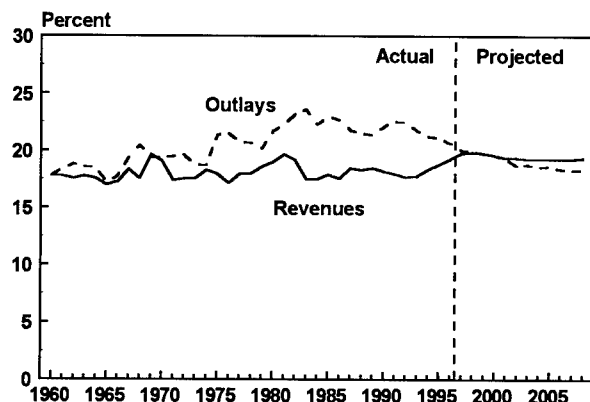
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
September Baseline Deficit (-) or Surplus	-57	-52	-48	-36	32	13	29	36	72	86
Changes										
Legislative ^a	1	b	b	3	-3	b	b	b	b	b
Economic										
Revenues	16	21	14	9	b	-4	-8	-15	-18	-27
Outlays ^a	6	7	5	7	9	12	15	19	24	29
Subtotal	22	28	18	15	9	8	8	4	6	1
Technical										
Revenues	14	10	14	14	13	12	11	10	8	6
Outlays ^a	15	12	13	17	18	21	23	25	30	35
Subtotal	29	22	26	32	32	33	34	35	37	42
Total Changes ^a	51	50	45	50	38	41	42	40	43	44
Current Baseline Deficit (-) or Surplus	-5	-2	-3	14	69	54	71	75	115	129

SOURCE: Congressional Budget Office.

a. Decreases in outlays are shown with a positive sign because they increase surpluses.

b. Less than \$500 million.

Summary Figure 2.
Revenues and Outlays as a Share of Gross Domestic Product (By fiscal year)



SOURCE: Congressional Budget Office.

A drop in discretionary spending, from 6.9 percent of GDP in 1997 to 5 percent in 2008, accounts for a significant part of the projected decline in outlays relative to economic output. Last year's Balanced Budget Act set statutory caps on discretionary appropriations through 2002 that will allow such spending to grow by only \$3 billion between 1998 and 2002. Under CBO's baseline assumption that discretionary spending will keep pace with inflation after the caps expire, discretionary spending will continue to decline as a share of GDP after 2002 because the growth in GDP is expected to exceed inflation by more than 2 percentage points. The projected decline through 2008 is also a continuation of a long-term trend: discretionary spending dropped from nearly 12 percent of GDP in 1966 to 10 percent in 1986 and just below 7 percent in 1997 (with almost all of the reduction occurring in spending for defense).

The other major contributor to the drop in spending relative to the economy is net interest, which is projected to be \$50 billion lower in 2008 than it was in 1997. In contrast to discretionary spending, however, the expected decline of that category of spending represents a change in recent trends. From 1962 to 1985, net interest grew from 1.2 percent of GDP to 3.2 percent. From 1985 through 1997, it equaled between 3.2 percent and 3.0 percent. If the surpluses that CBO currently projects materialize, they should push net interest down to 1.5 percent of GDP in 2008 as debt held by the

public declines from 47.3 percent of GDP in 1997 to 24.8 percent in 2008.

Entitlement and other mandatory spending is expected to grow faster than the economy, rising from 11.2 percent of GDP in 1997 to 12.7 percent in 2008. After climbing from just 6.1 percent of GDP in 1962 to almost 11 percent in 1975, such spending has fluctuated between 10 percent and 12 percent of GDP since then. Increases in spending for Medicare and Medicaid dominate the projected growth in this category of spending. Although the 7 percent average annual growth that CBO projects for those two programs over the next 11 years is well below the rates for the previous 11 years (13 percent for Medicaid and almost 10 percent for Medicare), it is still significantly above the expected growth of the economy (less than 5 percent a year on average) during that period. The growth of spending for Medicaid has slowed dramatically in the past two years (less than 4 percent each year), but CBO expects that increases in provider payment rates, enrollment, and utilization of health care services per enrollee will push annual Medicaid growth above 8 percent by 2004.

Spending for Medicaid is particularly difficult to predict. Because Medicaid is a joint state/federal program, the uncertainty surrounding the path of the economy, general trends in the provision of health care, and other uncontrollable factors that could affect the costs of the program are amplified by uncertainty about states' policymaking. If states continue their recent efforts to slow program growth and limit pressures on their budgets, federal Medicaid spending might grow more slowly than CBO anticipates. But increased enrollment in Medicaid—particularly in the event of an economic slowdown—might thwart states' efforts to control spending and thus boost federal costs at a rate faster than in CBO's baseline projections. It seems unlikely that federal spending for Medicaid will again grow at the nearly 30 percent annual rate experienced in the early 1990s, but growth well above 7 percent is certainly a possibility.

Like outlays, revenues decline relative to the size of the economy by the end of the projection period. In contrast to outlays, however, revenues as a share of GDP are currently at a historically high level—19.8 percent—and are projected to stay at that level for two more years before beginning to decline. Since World War II, revenues have approached 19.8 percent of GDP

only twice, and the circumstances in both of those years were quite different from current circumstances. In 1969, during the Vietnam War, revenues were boosted by a temporary surcharge on income taxes. In 1981, revenues were pushed up by several years of high inflation that moved taxpayers rapidly through the progressive rate brackets of the personal income tax, which at that time were narrower and had not yet been indexed for inflation.

The large share of GDP that revenues currently represent is the product of both high incomes and high effective tax rates on those incomes. In 1997, total taxable incomes (as measured in the NIPAs) reached the largest share of GDP since 1969. The remarkably strong economic boom has further expanded the tax base through increased capital gains realizations (which are not included in the NIPAs). The economic expansion has also pushed more income into higher tax brackets, further increasing revenues relative to GDP.

Strong growth in tax receipts in recent months indicates that revenue growth in 1998 is likely to slightly exceed GDP growth for the fifth year in a row. But revenues are projected to grow more slowly than GDP in 1999 and the next several years because certain tax cuts enacted in the Taxpayer Relief Act of 1997 will come into play, corporate income growth is projected to lag behind GDP growth, and revenues from capital gains are projected to fall relative to GDP. After declining to 19.3 percent of GDP in 2003, revenues are projected to keep pace with GDP through 2008. Individual income tax receipts are expected to grow faster than GDP; even though rate brackets are indexed for inflation, projected growth in real incomes boosts the effective tax rate. However, that faster growth is offset by slower growth in corporate income tax revenues (which decline as a share of GDP because growth in corporate income is projected to lag behind growth in GDP) and by slower growth in excise tax receipts.

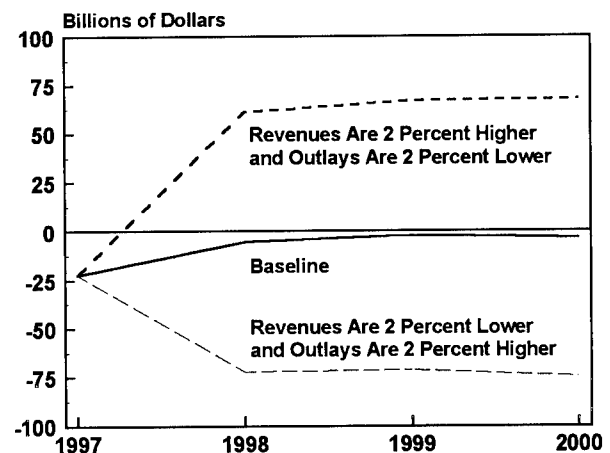
Uncertainty of the Projections

The \$51 billion reduction in CBO's estimate of the 1998 deficit since September, in the absence of any dramatic developments in the economy or the budget, illustrates how volatile budget estimates are. That volatility was also forcefully driven home by CBO's and the Administration's experience in projecting the deficit for 1997. Last January, three months into the fiscal

year, CBO estimated that the deficit for 1997 would be \$124 billion. Less than a month later, the Administration projected a deficit of \$128 billion. The actual deficit was \$22 billion, more than \$100 billion lower than either estimate.

The differences between projected and actual outcomes may not be as great in the next few years, but even much smaller deviations than those in 1997 can still seem significant. For instance, last January CBO projected that revenues would be \$1,507 billion in 1997. Actual revenues came in at \$1,579 billion, nearly 5 percent higher than anticipated. Actual outlays were almost 2 percent lower than expected in January. It would be surprising if actual 1998 revenues or outlays were 5 percent higher or lower than CBO is currently projecting, but an examination of the historical record shows that a 2 percent error is not unlikely. If both revenues and outlays were 2 percent higher (or lower), the errors would be roughly offsetting and there would be little effect on the budget's bottom line. However, if revenues were higher by 2 percent and outlays were lower by 2 percent (or vice versa), the bottom line would swing by more than \$60 billion. Because CBO currently projects very small deficits for the next three years, such a swing could lead to a moderate surplus in any of those years. Or a swing in the opposite direction could keep a balanced budget from being achieved, and that could be true even if a legislative package was en-

Summary Figure 3.
Deficit (-) or Surplus Under Alternative Assumptions (By fiscal year)



SOURCE: Congressional Budget Office.

acted that was supposed to balance the budget before 2001. Summary Figure 3 shows the budget outcomes if revenues and spending are higher or lower than CBO's baseline projections by just 2 percent in the next three years.

Though fairly typical, the illustrative 2 percent change in revenues and outlays in 1998 through 2000 does not represent the range of possible alternative outcomes. As already noted, the error in CBO's revenue projection for 1997 was 5 percent. In addition, unexpected changes in economic performance could have a much greater effect on the budget's bottom line. CBO has estimated that even a moderate recession, like the one experienced in the early 1990s, could cause the budget outlook to deteriorate by more than \$100 billion for a year or so.² Similarly, unexpectedly strong growth for a few more years could improve outcomes by \$100 billion in a given year. Such cyclical disturbances would have little effect on the longer-term outlook, but if potential growth was just 0.5 percentage points higher or lower than CBO projects for the next 10 years, budget outcomes would be about \$150 billion better or worse than projected in 2008.

2. See Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1998-2007* (January 1997), Chapter 3.

Conclusion

The economic and budget outlook for the next 11 years appears bright, but there are good reasons for caution: CBO's current assumptions could prove too optimistic, policymakers must still make tough decisions to achieve assumed savings in discretionary spending, and the aging of the baby-boom population will increase pressure on the federal budget just beyond the current budget window.

In addition, although CBO's baseline projections provide a useful benchmark for policymakers, neither they nor any other projections can be used to fine-tune fiscal policies or hit a precise budgetary target. Despite CBO's projection of small deficits for the next three years, the budget could end up in surplus in any of those years even if the Congress and the President did nothing to reduce spending or increase revenues. Similarly, deficits could persist even if legislation was enacted that achieved significant savings in those years. With spending and revenues of about \$1.7 trillion each, very small percentage errors in budget projections can produce swings in the bottom line that far exceed either the small deficits that CBO is projecting for the next few years or the legislative savings that are likely to be considered.

The Economic Outlook

The combination of strong economic growth and declining inflation in the United States surprised most analysts in 1997. Real growth increased to its highest rate since 1988, the unemployment rate fell to a 24-year low, and the inflation rate dropped to levels last seen in the 1960s. Such a combination, however, is unlikely to persist in the face of the ongoing economic crisis in Asia and the continued buildup of domestic inflationary pressures.

In the Congressional Budget Office's (CBO's) forecast, growth slows through 1999. Real gross domestic product (GDP) increases 2.3 percent from the fourth quarter of 1997 to the fourth quarter of 1998 and 1.9 percent from 1998 to 1999 (see Table 1-1 and Figure 1-1). The unemployment rate, at 4.8 percent in 1998, is the lowest in 25 years; it inches up to 5.1 percent in 1999. Inflation as measured by the consumer price index (CPI) is 2.4 percent in 1998 and rises to 2.5 percent in 1999. Short-term interest rates increase from 5.1 percent in 1997 to 5.3 percent in 1998 and then fall back slightly, to 5.2 percent, in 1999. Long-term interest rates, which in December averaged 5.8 percent, edge up to 6.0 percent in 1998 and 6.1 percent in 1999.

CBO does not forecast economic cycles beyond two years. Instead, it recognizes a range of possibilities for the long-run path of the economy, taking account of the probability of booms and recessions. The middle of that range is the projection for the economy. In CBO's projections for 2000 through 2008, real GDP growth averages 2.2 percent a year and CPI inflation, 2.8 percent a year. The unemployment rate averages 5.9 percent after 2002. Short-term interest rates are assumed to reach an average of 4.7 percent after 2000; long-

term interest rates are already close to their expected average of 5.9 percent.

The economy is, of course, highly unlikely to develop precisely as the forecast predicts: CBO can see possible outcomes on both sides, either more or less optimistic. For example, further spreading and deepening of the Asian crisis, a sizable drop in the U.S. stock market, or a burst in the inflation rate followed by a strong tightening of monetary policy could stall the economy. Alternatively, the economy could continue to grow at a robust rate with low inflation and moderate interest rates.

Even fairly small deviations from the forecast path could significantly change CBO's budgetary projections in either direction (see Chapter 2 and Appendix C). A typical economic boom or recession can move the deficit by well over \$100 billion in a single year.¹

The State of the Economy

The fortunate combination of high growth and declining inflation in 1997 is unlikely to persist. CBO expects the economic crisis in Asia to slow U.S. growth. Moreover, the conditions that have recently put the brakes on inflation are expected to unravel over the next two years.

1. See Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1998-2007* (January 1997), Chapter 3.

Several East Asian countries saw their currencies plunge amid financial market turmoil and large-scale bankruptcies in the second half of 1997. Those developments will sharply reduce growth in those countries from its recent rapid pace. The fallout from that crisis will dampen U.S. net exports and temper the growth of U.S. output through 1999. By itself, the weakening of East Asian currencies will also lower U.S. import prices and thereby act to hold down U.S. price inflation.

Nevertheless, U.S. inflation will probably rise in 1998. Domestic inflationary pressures have built up over the past two years and will continue to do so in 1998. The puzzling decline in inflation in 1997 may have resulted from a combination of special conditions in certain sectors of the economy and technical adjustments in the CPI. The dampening effect of the special conditions is expected to diminish during 1998 and early 1999. CBO expects that rising inflation, coupled

Table 1-1.
The CBO Forecast for 1998 and 1999

	Actual 1996	Estimate 1997 ^a	Forecast	
			1998	1999
Fourth Quarter to Fourth Quarter (Percentage change)				
Nominal GDP	5.6	5.6	4.5	4.1
Real GDP ^b	3.3	3.6	2.3	1.9
Implicit GDP Deflator ^c	2.2	1.9	2.1	2.2
Consumer Price Index ^d	3.2	1.9	2.4	2.5
Calendar Year Average (Percent)				
Real GDP Growth ^b	2.8	3.7	2.7	2.0
Unemployment Rate	5.4	5.0	4.8	5.1
Three-Month Treasury Bill Rate	5.0	5.1	5.3	5.2
Ten-Year Treasury Note Rate	6.4	6.4	6.0	6.1

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Estimates of nominal GDP, real GDP, and the implicit GDP deflator are based on data for the first three quarters of 1997 published November 26, 1997, and CBO's expectation for the fourth quarter of 1997. The consumer price index, the unemployment rate, the three-month Treasury bill rate, and the 10-year Treasury note rate are actual values for 1997.

b. Based on chained 1992 dollars.

c. The implicit GDP deflator is virtually the same as the GDP price index.

d. The consumer price index for all urban consumers.

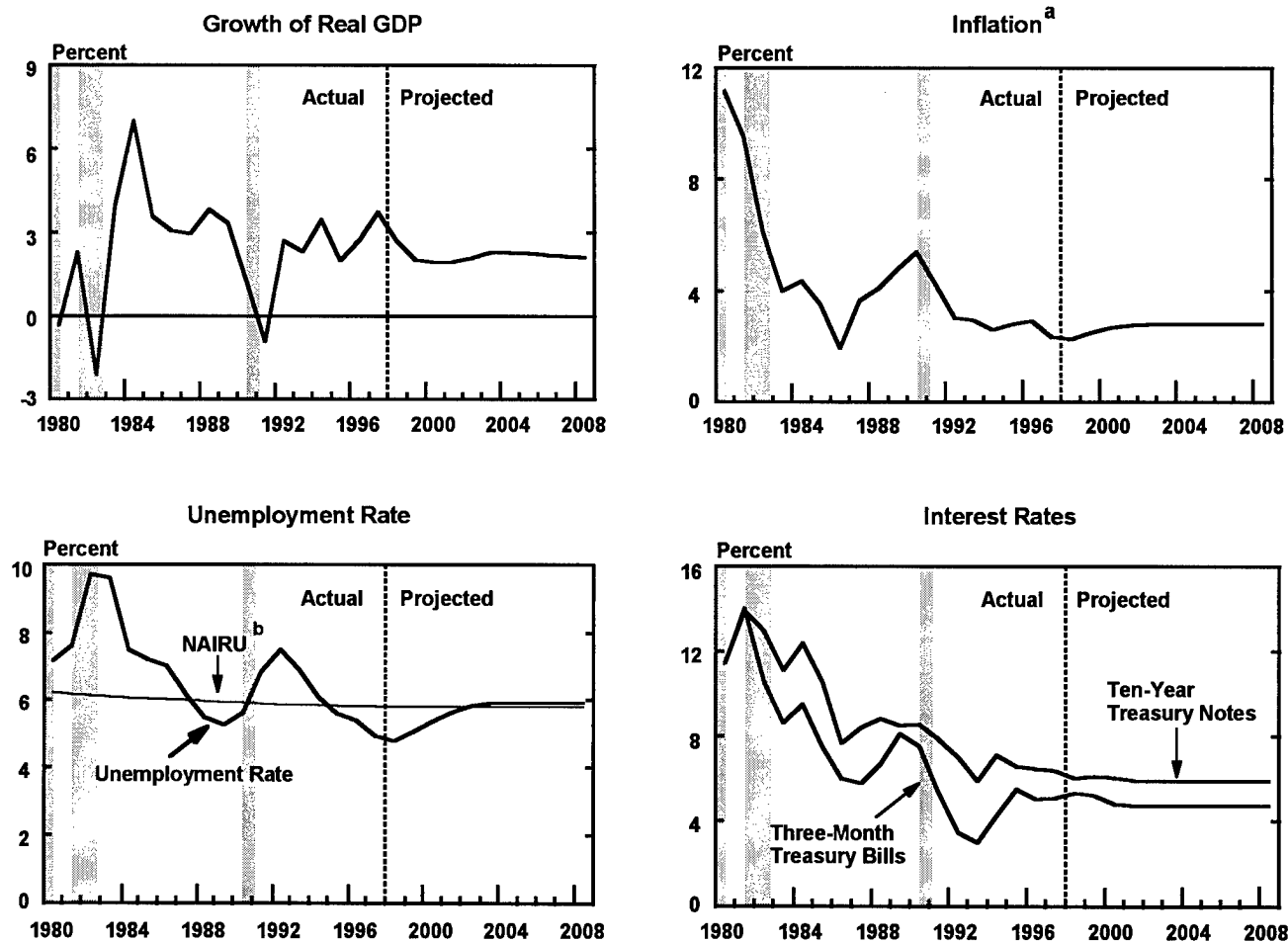
with continued tightness in labor markets, may prompt the Federal Reserve to raise short-term interest rates moderately this year.

The Asian Crisis

The Asian currency crisis that erupted in early July choked growth in Southeast Asia and spread north,

forcing South Korea to accept tough conditions attached to the International Monetary Fund's \$57 billion bailout package and pushing Japan's economy into further disarray (see Box 1-1). The depth of the crisis and its rapid spread have prompted most analysts to downgrade their forecasts for foreign growth. The Asian crisis is still unfolding, however, and it is too early to assess its full impact. But many analysts fear there is still considerable downside risk to their forecasts. Of

Figure 1-1.
The Economic Forecast and Projection



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

NOTES: All data are annual values; growth rates are year over year.

a. The consumer price index for all urban consumers (CPI-U). The treatment of home ownership in the official CPI-U changed in 1983. The inflation series in the figure uses a consistent definition throughout.

b. The NAIRU is CBO's estimate of the nonaccelerating inflation rate of unemployment.

Box 1-1. What Caused the Asian Crisis?

On July 2, 1997, authorities in Thailand abandoned their defense of the baht, allowing it to plunge against the dollar and other major currencies. Since then, what started as a run on the currency of one relatively small nation has escalated into a financial crisis that has engulfed Malaysia, Indonesia, the Philippines, and South Korea; led several emerging countries—including Hong Kong, Brazil, India, and Russia—to sharply raise interest rates to defend their currencies; and pushed Japan's economy into further disarray. The rescue effort, led by the International Monetary Fund, has so far totaled over \$100 billion. How did the crisis spread and deepen so fast? And why?

The quick tumbling of Asian currencies since early July and the ramifications for emerging countries on other continents are a testament to the interconnectedness of the world economy. Countries in various stages of economic development are linked through international trade and capital flows. Because many emerging countries export similar goods, the devaluation of their currencies exerts downward pressure on the currencies of their trade competitors. Moreover, currency traders can pull funds out of a country at a moment's notice if they lose confidence in its currency.

Indeed, the traders' ability to move massive amounts of money across national borders has played an important role in the unfolding of the crisis. The crisis was triggered by their decisions to sell the currencies of Southeast Asian countries whose financial and real estate sectors were showing signs of stress. The crisis then spread like wildfire through competitive devaluation and, perhaps more important, the contagious loss of confidence.

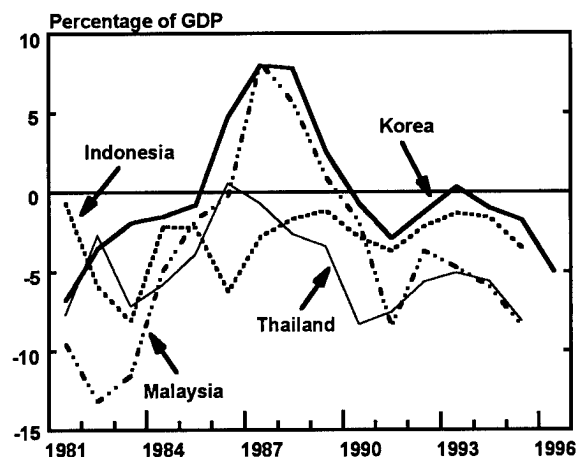
The root causes of the crisis lie deeper, however. Although the problems in each of the affected countries differ somewhat, the region's fragility and loss of confidence can be traced to the interplay of three factors: large external shocks, underdeveloped financial institutions, and inappropriate policies.

External Shocks. The currencies of many Asian countries were pegged to the dollar. As a result, the yen's sharp drop against the dollar between mid-1995 and mid-1997, and the 50 percent devaluation of the Chinese yuan in 1994, rendered their currencies overvalued. Their high-end products became uncompetitive relative

to similar Japanese products, and their low-end products were being priced out of markets by similar Chinese exports. The slowdown in export growth was then amplified by a cyclical downturn in the electronics industry worldwide last year. To make matters worse, the prolonged stagnation of the Japanese economy—a major market for the exports of many Asian countries—did little to alleviate their export slump. As shown in the accompanying figure, those external developments have helped widen the current-account deficits of those Asian countries in recent years, putting tremendous downward pressure on their exchange rates.

Underdeveloped Financial Institutions. Although Asian economies have become more developed and better integrated with the world economy, their financial infrastructure has not kept pace. Many Asian governments protected their banks from foreign competition while pressuring them to make politically connected loans for questionable investments by state-owned or state-sponsored enterprises. In effect, banks were agents of governments' industrial policies. At the same time, banking regulation was poor, characterized by too much market interference (in the form of ceilings and floors on interest rates and restrictions on foreign competition) and too little regulation (in the form of capital requirements, supervision, and the enforcement of accepted accounting standards). In particular, loans by

Current-Account Balances of
Selected Asian Countries



SOURCES: Congressional Budget Office; International Monetary Fund.

Box 1-1.
Continued

banks or finance companies are often implicitly guaranteed by governments. The implicit guarantees encouraged banks to lend excessively to risky projects, feeding the precarious imbalances in the economy.

Inappropriate Policies. Some of the economic policies the governments pursued also contributed to the problem. Policies to continue pegging nominal exchange rates to the dollar despite massive capital inflows allowed economic imbalances to mount. To keep the local currencies from appreciating, governments had to purchase the surging inflows of dollar assets. A credit boom ensued during 1994 and 1995, fueling speculation in the financial and real estate markets. With their nominal exchange rates pegged and their inflation higher than that of many of their competitors, the goods of those countries became less competitive internationally, and their current-account deficits increased. Speculation in the real estate market propelled its rate of return skyward and enticed banks to borrow at relatively low overseas rates to lend in that market. That problem was especially pervasive in Southeast Asia. For a long time, the governments and regulators there did nothing despite the increasing financial fragility caused by excessive lending for real estate speculation.

The tide turned in 1996 and 1997, when growing evidence of banking crises and the worsening current-account deficits prompted the first sign of capital outflows. The pressure for local currencies to depreciate then began to mount. To support the exchange rate peg, the monetary authorities had to reduce the domestic money supply and raise interest rates. The interest rate increases proved to be an unbearable shock to the overextended financial sectors. The central banks finally allowed their currencies to devalue, but that only added to the woes of the banking sector. Betting their currency would stay pegged to the dollar, banks had already borrowed heavily in dollars to lend in local currencies.

In retrospect, having a more flexible exchange rate during both the credit boom and bust would have helped those countries. More flexibility would have allowed the real exchange rates to adjust to prevent unsustainable current-account imbalances from developing. It would also have helped deter one-sided bets in currency speculation.

Another major policy mistake that some Asian governments made was to develop strategic "national" industries, such as cars, steel, semiconductors, and consumer electronics. The governments simultaneously encouraged excessive additions to capacity within those industries, which caused product prices to fall. That problem has been especially acute in South Korea, where losses have pushed several huge conglomerates, or *chaebol*, over the brink. Because banks have been directed by the government to make loans to those conglomerates at low rates, the failure of the conglomerates has increased the number of bad loans, rendering many banks practically insolvent. Many banks have large foreign debt in dollar terms; thus their weakened positions make the Korean won even more vulnerable to a speculative attack on their currency.

The tumbling of one currency after another in East Asia demonstrates how unforgiving the new global market forces can be. But it would be wrong to conclude that capital mobility does more harm than good. Currency crises had occurred before in Asia and elsewhere to realign the exchange rates when fundamental economic forces had rendered the exchange rate peg unsustainable. Although the cost of abrupt currency realignments can be steep and painful, continuing to peg a currency at an overvalued level often only delays the eventual collapse—a delay that becomes increasingly costly as the imbalances accumulate.

Despite their current problems, the Asian economies are fundamentally sound: they have high savings, budget discipline, flexible labor markets, and low taxation. Therefore, in isolation, neither the banking sector's problems nor the currency devaluations would have wreaked as much havoc. However, the interaction of those two problems has escalated the crisis. If Asian governments heed the market discipline and are quick to undertake necessary financial reforms, the prospect of sustainable and dynamic long-term growth for the region should be bright. Without substantial reform, their economies will continue to be prone to a similar or even worse crisis, even if they manage to export their way out of their plight in the short run.

particular concern is the possibility that the crisis will spread to other emerging economies and that the problems of Japan's banking system will spin out of control and drag its economy into an even deeper slump.

The economies of East Asia (excluding Japan) have helped power the global economy over the past six years, with growth in that region averaging about 8 percent annually. The currency and debt crisis is expected to slow the region's growth to about 3 percent for 1998, or less if the situation continues to worsen.

The crisis will modestly dampen U.S. growth and inflation through direct trade and, to a lesser extent, investment links. U.S. exports are roughly equal to 12 percent of GDP and imports to 13 percent. About 30 percent of total U.S. exports go to Asia (including Japan), and about 37 percent of imports come from that region. U.S. foreign direct investment in Asia represents about 18 percent of U.S. direct investment worldwide. East Asia's abrupt slowdown will reduce U.S. net exports to that region; it will also lower profits of U.S. multinational corporations as they convert already depressed profits earned in local currencies to dollars.

CBO estimates that the widening of the trade deficit alone will lower U.S. growth by about half a percentage point. A modest rise in the share of imports from East Asia and an accompanying drop in prices will probably dampen domestic inflation, reducing the need to slow the economy through restrictive monetary policy. Falling import prices will also tend to increase purchasing power in the United States, which will probably encourage domestic consumption.

The Asian crisis is therefore likely to further widen the real trade deficit in goods and services, which has been on an upward trend since 1992. The trade gap has been rising, not because U.S. firms are being pushed out of world markets but because U.S. markets have been growing more rapidly than world markets.

Slow growth abroad has not only been a factor in the U.S. trade deficit but has also reduced inflationary pressure in the United States. Strong domestic demand is less likely to drive up inflation when it can be countered by price-competitive imports. The reduced threat of inflation may have helped the U.S. expansion to continue longer than it would have otherwise.

From that perspective, the prospect of a worsening U.S. trade deficit in 1998 and 1999 as a result of the Asian crisis is less worrisome than the possibility that the whole region might suffer a prolonged malaise like that in Japan, a global trend toward competitive devaluation, a deflationary spiral, or a rise in isolationism.

The Inflation Puzzle

Historically, robust economic growth in a time of low unemployment has signaled a buildup of inflationary pressures on prices and wages. Those conditions, which have prevailed in the United States since 1995, further intensified in 1997. Wage growth has increased, which could eventually boost price inflation. However, until now, inflation has slowed even as growth has accelerated—a combination that was a surprise to most analysts.

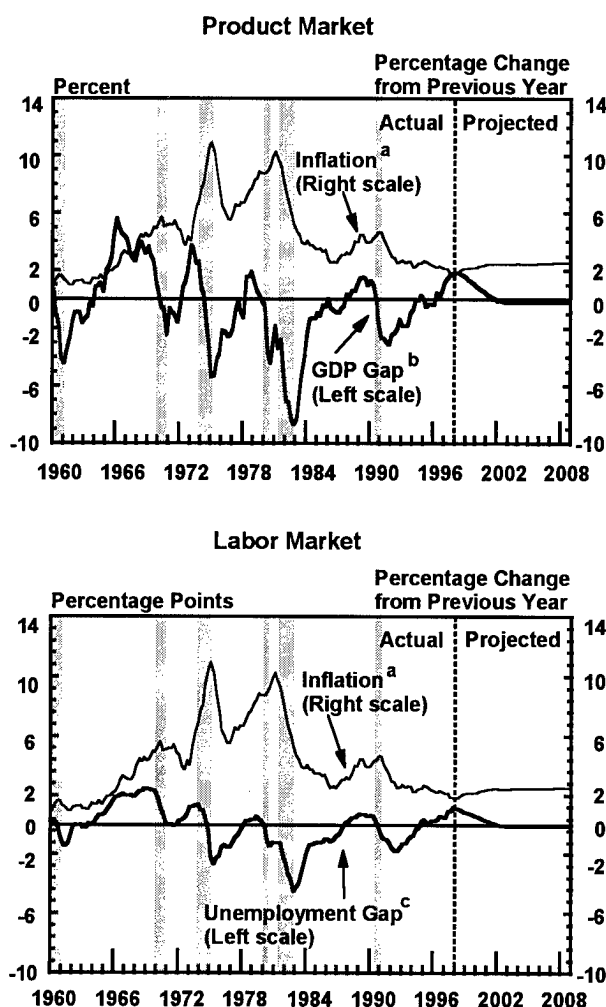
The drop in overall inflation, in the face of indications to the contrary, is an anomaly that current models used to forecast inflation cannot explain. Special temporary conditions in a few sectors account for much of the puzzle, but other factors may have played a role too.

Indicators of Inflationary Pressures. The Federal Reserve Bank's "beige book"—a survey of the economic conditions in the 12 Federal Reserve districts—reported tight labor markets across the country at the end of 1997. Almost all districts said they were having difficulty hiring and retaining seasonal workers, and some regions reported shortages of technical computer workers and engineers. There is also evidence that the economy is operating near capacity. Manufacturers in some districts reported that their production was constrained by capacity limitations. Further evidence comes from a survey conducted by the National Association of Purchasing Managers, which shows that suppliers' deliveries slowed for most of 1997.

The anecdotal evidence in those surveys suggests that inflationary pressures are building, a picture consistent with that painted by two aggregate indicators of inflationary pressures in the economy: the GDP gap and the unemployment gap. The GDP gap, which is the amount by which current levels of demand exceed the sustainable level of output, measures inflationary pressures building in the market for goods and services.

The unemployment gap, which is the amount by which the unemployment rate is below its sustainable rate, measures corresponding pressures in the labor market. In CBO's estimate, the output gap has been positive—

Figure 1-2.
Inflation and Tightness in the Product and Labor Markets



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

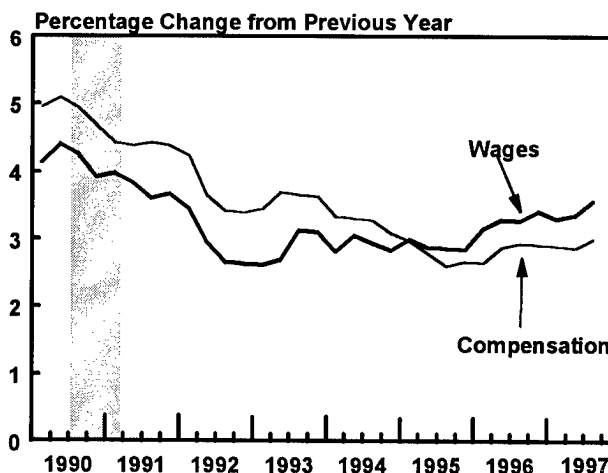
- a. Implicit GDP deflator.
- b. The GDP gap indicates the degree of tightness in product markets. It is the difference, in percent, between real GDP and CBO's estimate of potential GDP. When positive, that difference indicates inflationary pressure.
- c. The unemployment gap indicates the degree of tightness in the labor market. It is the difference between CBO's estimate of the nonaccelerating inflation rate of unemployment (NAIRU) and the actual unemployment rate. When positive, that difference indicates inflationary pressure.

that is, the U.S. economy has operated above potential—since the second quarter of 1996, rising well above potential in 1997 (see Figure 1-2). The unemployment gap has signaled rising inflation for a longer time—since late 1994, when the unemployment rate fell slightly below CBO's estimate of its sustainable rate.

The notion of a sustainable rate of unemployment plays a large role in those estimates. That level, commonly called the NAIRU, or the nonaccelerating inflation rate of unemployment, is the rate of unemployment consistent with a stable inflation rate. When the unemployment rate falls below the NAIRU, it does not imply that inflation will immediately pick up; rather, it just means that inflation is more likely to rise than to fall. The NAIRU is not constant, and it can change for a number of reasons. Some of those reasons (such as changes in the percentage of teenagers in the labor force) are well understood and are therefore reflected in estimates of the NAIRU. But other factors that can change the NAIRU are not well understood.

Despite these uncertainties, the contrast between what the output gap and the unemployment gap indicate for inflation, and what has occurred, is striking. According to the output gap, inflation should have risen roughly 0.3 percentage points since 1994; according to

Figure 1-3.
Growth in the Employment Cost Indexes for Wages and Compensation in the Private Sector



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

the unemployment gap, 0.7 percentage points. But inflation has not increased. Instead, as measured by the GDP deflator, it has *fallen* 0.6 percentage points since the end of 1994 (CPI inflation has fallen by a larger amount). The discrepancy between actual inflation and the inflation predicted by those indicators—the “missing inflation”—is about a percentage point and could be as much as 1½ percentage points.

The response of private-sector wages to demand pressures over the past year and a half has been more in line with historical behavior than has price inflation. Despite the slowing of price inflation, the recent tightness of the labor market has begun to show up in the form of higher employment costs. For the year ending in the third quarter of 1997, the employment cost index for wages and salaries increased 3.6 percent, up 0.8

Box 1-2.

Changes in Calculating the Consumer Price Index

The Bureau of Labor Statistics (BLS), the agency that compiles the consumer price indexes (CPIs), has instituted a number of changes in recent years in the way the price indexes are calculated and will be incorporating additional changes this year and in 1999. Although the methods used to construct the CPIs have been modified many times over the long history of the series, the changes in the 1995-1999 period are particularly important.

The changes address concerns the BLS and others have had for many years about how accurately the CPIs reflect the effect of price changes on consumers. In 1995, those concerns led the Senate Finance Committee to form an advisory commission, known as the Boskin Commission, to examine the possibility that, on average, the growth of the CPI might overstate the true rate of inflation (that is, the growth of the CPI might be biased upward). The commission's final report in 1996 estimated that the growth of the CPI was indeed biased upward by about 1.1 percentage points, although that estimate is not universally accepted. Some of the improvements the BLS is making to the CPI are related to issues discussed in the commission's final report, but many of the changes cannot be directly compared with the commission's estimate of bias.

The BLS's Changes

The changes that occurred between 1995 and 1997 probably reduced the measured increase in inflation by 0.2 to 0.3 percentage points a year compared with what the former methods would have generated. Those modifications included a general change that affected almost all expenditure categories as well as specific changes to categories such as rents for apartments and houses, prescription drugs, and hospital services.¹

The changes that will be introduced in 1998 and 1999 will further reduce CPI growth, by approximately 0.4 percentage points more by the end of 2002.² During 1998, the BLS will begin to use new weights for calculating the CPI. Shifting to more current weights—or rebenchmarking—tends to reduce the growth of the CPI because they put more emphasis on items whose prices have been growing less rapidly in recent years. The CBO forecast assumes that the 1998 rebenchmarking will initially reduce CPI growth by 0.15 percentage points per year. For the CPI for January 1998, the BLS will also adopt a new procedure for measuring prices for personal computers and peripheral equipment that will reduce the growth of the CPI by as much as 0.06 percentage points per year.

In 1999, the BLS will make two changes in CPI methodology. First, it will change the formula for compiling many of the subaggregates of price change. Under certain assumptions about how people alter their consumption patterns in response to changes in relative prices, the new formula more accurately approximates a cost-of-living index. The CBO forecast assumes that this change will reduce CPI growth by 0.14 percentage points per year.

The second change affects sample rotation—the procedure by which the BLS periodically brings new stores and items into the sample of goods and services selected for price quotes. Sample rotation, which updates the selections to try to reflect current shopping patterns, is an ongoing process that can affect the CPI every year. The new procedure will enable goods and services to be incorporated into the CPI more quickly. Estimating the effect of that change on CPI growth is difficult, but it will probably reduce CPI growth. Because the prices of new goods often decline during the first five or 10 years they are on the market, incorporating them into the CPI

1. See Congressional Budget Office, *The Economic and Budget Outlook: An Update* (September 1997).

2. The 1998-1999 changes are discussed in detail in Bureau of Labor Statistics, *Monthly Labor Review* (December 1996).

percentage points from the end of 1995 (see Figure 1-3). The growth rate of the employment cost index for total compensation (including fringe benefits) rose slightly less, from 2.7 percent to 3.0 percent, over the same period. Declining inflation in medical benefits has held the growth of the index for total compensation below that of the index for wages and salaries.

The recent uptick in wage inflation does not necessarily imply that price inflation will follow. If increases in wages are matched by increases in labor productivity, then wage increases will not be the source of increases in the growth of labor costs per unit of output. The growth of labor productivity surged to an average annual rate of 3.1 percent for the second and third quar-

Box 1-2. Continued

earlier makes it more likely that CPI growth will be dampened. CBO previously assumed the new procedure would reduce CPI growth by as much as 0.1 percentage point in the first year, but the current forecast embodies a smaller effect—only 0.08 percentage points spread over four years.

Clearly, the combined effect of the BLS's changes on the CPI over the 1995-2002 period will be substantial. Taken together, the changes may reduce measured inflation on the order of 0.7 percentage points compared with what would have occurred if no methodological changes had been made. The changes improve the accuracy of the CPIs, but they complicate the assessment of the change in inflation over recent years and over the next few years.

The Boskin Commission's Findings

In its examination of potential biases, the Boskin Commission concluded that growth in the CPI as of late 1996—after the BLS had made some of the changes described here—was overstated by about 1.1 percentage points per year. Some of the BLS's proposals for methodological changes address the same issues that the Boskin Commission raised, but a significant proportion are not directly related to problems mentioned in that report.

Leaving out the methodological changes that the BLS made before the commission's 1996 report and the changes that address different issues, what remains is about 0.40 to 0.45 percentage points that conceptually match the elements identified by the commission. The BLS's changes in the measurement of hospital and computer prices fall into the commission's category of "new products/quality change," and the change in sample rotation roughly corresponds to the "new outlets" category. CBO estimates that those changes together will ultimately reduce CPI growth by about 0.17 percentage points. By comparison, the commission's estimate of the total bias for those categories is 0.70 percentage points (see the accompanying table). The BLS has not announced any other specific modifications to address bias stemming from the intro-

duction of new products or changes in the quality of goods and services, but it will continue to make incremental improvements to the CPI. The BLS does not, however, endorse all of the Boskin Commission's arguments or estimates of bias.

<u>Source of Bias in the CPI</u>	<u>Commission's Estimate of Bias (Percentage points)</u>
New Products/Quality Change	0.60
New Outlets	0.10
Lower-Level Substitution	0.25
Upper-Level Substitution	<u>0.15</u>
Total	1.10

The BLS's change in the formula for compiling subaggregates corresponds to the commission's "lower-level substitution bias" category, but the effect is likely to be smaller than the commission estimated—0.14 percentage points instead of 0.25. The BLS will soon announce the categories of the CPI for which the new formula will be used, and better estimates of the effect may be available then.

The BLS's 1998 rebenchmarking is related to the upper-level substitution bias mentioned by the Boskin Commission, but it is not a permanent solution to that problem. Updating the weights in the CPI every 10 years or so helps keep the upper-level substitution bias from growing as rapidly as it would if the weights were not updated, but eliminating the bias requires a procedure to continually adjust for consumers' changing spending patterns. The BLS is investigating various ways in which a CPI could be compiled that would account for those changes and has announced its intention to produce such a measure by 2002. The intention is to publish that measure in addition to the currently published version of the CPI. In contrast to the current CPI, previously published data would be subject to revision.

ters of 1997, after averaging less than 1 percent a year over the previous decade. Such an increase this late in an expansion is unusual and has led some commentators to expect that the burst of productivity will persist, but CBO feels that is unlikely. Preliminary evidence suggests that productivity growth slowed dramatically and may have been negative in the last quarter of 1997. In addition, data on productivity are volatile and subject to large revisions and should therefore be interpreted with caution.

Explanations for the Puzzle. What accounts for the missing inflation? Part of the answer can be traced to technical adjustments in the CPI. Unusual conditions in a few key sectors explain much of the rest, but other explanations have been offered.

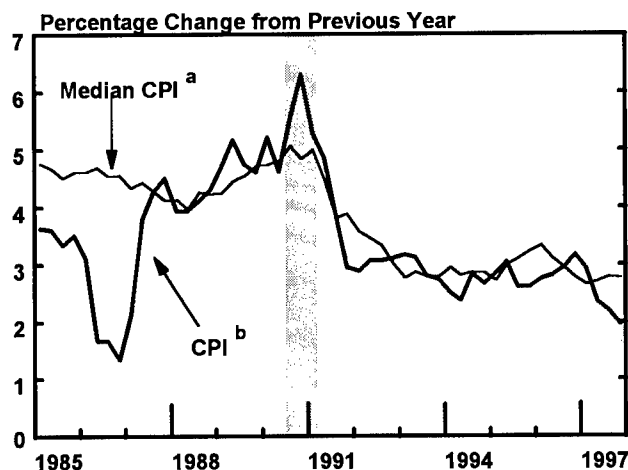
Technical Adjustments in the CPI. The consumer price index has been undergoing a number of methodological changes that have permanently reduced the reported level of inflation (see Box 1-2). The adjustments made in January 1995, mid-1996, and January 1997 have cumulatively reduced the growth in the CPI by about 0.2 to 0.3 percentage points. The GDP deflator was also affected, since components of the CPI are used to calculate prices for about 60 percent of GDP. The effect of the technical adjustments on the GDP deflator was therefore smaller than that on the CPI, permanently reducing its growth by about 0.1 to 0.2 percentage points.

Sectoral Conditions. The decline in inflation measured by the CPI and the GDP deflator may not accurately reflect what has happened to typical price changes in the economy. Although inflation as measured by the CPI and GDP deflator has slowed, an alternative and perhaps more robust measure of typical price changes—the median CPI published by the Federal Reserve Bank of Cleveland—does not indicate a rapid decline (even though it should reflect the effect of measurement changes in the CPI). Both the ordinary CPI published by the Bureau of Labor Statistics (BLS) and the median CPI are based on the same observations about individual price changes in the economy, weighted by expenditures. Whereas the CPI averages those observations, the median CPI reports a rate of price change such that half the observations are above it and half are below. A median is much less sensitive to extreme observations than is an average and thus is a more robust measure of typical price changes.

The inflation rate suggested by the median CPI has remained much more stable through the 1990s than that indicated by the overall CPI. Inflation in the median CPI held steady at a rate of about 2.8 percent in 1997, while inflation in the CPI plummeted to 1.9 percent by the end of the year (see Figure 1-4). With such a large difference between those measures of inflation, it is worthwhile to determine which individual price movements may account for the difference and to consider whether the factors underlying those differences are likely to persist. Price movements in three sectors in particular seem to be holding down overall inflation: imports, medical care, and computers.

Much of the difference may be related to the unusual weakness of import prices (see Figure 1-5). But that weakness is unlikely to continue for the next two years. The decline in import prices reflects in small part lower inflation worldwide. A far more important influence, however, has been the rise in the dollar since 1994. The turmoil in Asia may mean that the dollar will continue to be strong for a few more months or

Figure 1-4.
CPI and Median CPI Inflation



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland.

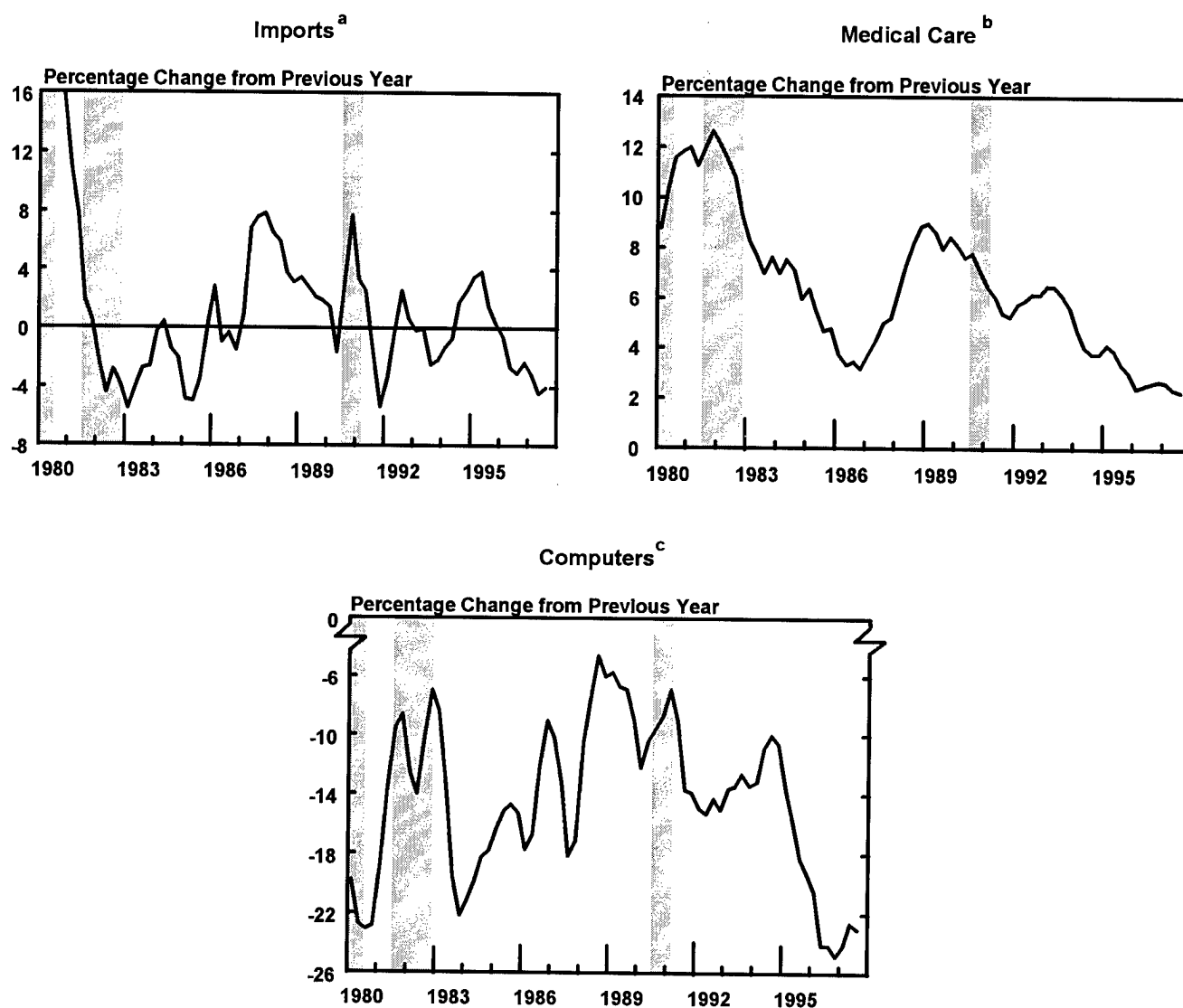
NOTE: The CPI inflation rate moved well below the median CPI inflation rate when oil prices plummeted in December 1985.

- a. The median CPI inflation rate reports a price change such that half the observations are above it and half are below.
- b. The consumer price index for all urban consumers.

quarters, but eventually its rise will stop, as will the decline in import prices. Imports will remain cheap but will no longer contribute directly to holding down inflation.

Another important contributor is the medical care sector. Inflation in that sector, as measured by the CPI, averaged nearly 8 percent growth in the 1980s. Recent changes in the market for medical care, especially the

Figure 1-5.
Inflation in the Import, Medical Care, and Computer Sectors



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

- a. Price index for imports.
- b. Price index for business investment in computers.
- c. Price index for medical care.

expansion of managed care, have brought medical inflation down below 3 percent. Further declines in medical inflation seem unlikely: the expansion of managed care must slow as it becomes the dominant way to provide care, and it is not likely to bring medical inflation much below overall inflation (see Appendix H).

The computer sector also appears to be depressing inflation more than usual, although it primarily affects the implicit GDP deflator measure of inflation, not the CPI. The extraordinarily rapid pace of technical change has lowered computer prices at an average rate of about 13 percent throughout the 1980s and early 1990s. Since 1994, however, changes in the computer market have accelerated that rate of decline to around 20 percent annually. One important factor in that acceleration has been excess production capacity worldwide for memory chips, a situation that is not likely to persist. Another factor is the competition among sellers of processor chips, which has driven down their prices. Those price reductions will probably not be reversed, but further reductions are likely to match more closely the rate of technical advance in computer manufacturing. Thus, future annual price declines are likely to be about 15 percent rather than 20 percent, and the downward pressure of computer prices on overall inflation will be somewhat lessened.

Other Explanations. Although exceptional conditions in a few sectors appear to account for most of the missing inflation, other explanations have been proposed. Some analysts suggest that inflation may respond to demand pressures more slowly now than in the past. For example, a good inflation record may have enhanced the credibility of the Federal Reserve, encouraging firms to expect monetary policy actions to stifle inflationary pressures before inflation actually rises. When inflation is high and is expected to remain so, firms are more likely to raise prices, because the general increase in prices will camouflage any errors. When inflation is low and is expected to remain so, businesses are more likely to shy away from raising prices. That explanation makes a lot of intuitive sense but may not fully account for recent experience: since the end of 1994, indicators of expected inflation have not fallen as much as actual inflation.

Other analysts suggest that increased openness to foreign trade has muted the short-run response of infla-

tion to demand pressures. If that was true, increased competition from foreign producers would keep domestic firms from raising prices. But increased U.S. openness is not a new phenomenon. In fact, trade as a percentage of GDP has grown steadily over the past 40 years.

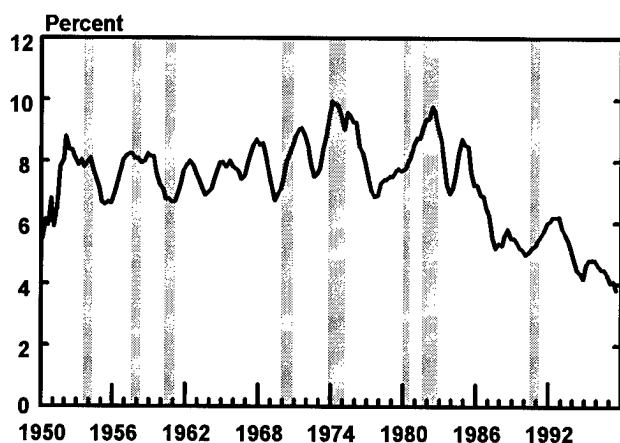
Lessons from the Puzzle. The cause of the puzzle is uncertain, but forecasters' views of the causes invariably affect their economic outlook. If the missing inflation stems from special conditions in the import, medical care, and computer sectors, then inflation is likely to rise once those conditions unwind. That argument is equivalent to assuming that those conditions have temporarily lowered the NAIRU, erasing the unemployment gap for a while. Eventually, when prices in those sectors return to normal, the NAIRU will go back to about 5.8 percent and the inflation rate will rise. Because inflation has not yet increased, however, the measures of demand pressures are even more uncertain. It is also difficult to ignore the possibility that the relationship between inflation and demand pressures has changed—that is, the NAIRU has been permanently lowered. In that case, traditional measures of demand pressures may be overestimating inflation.

The Prospect for Near-Term Growth

The U.S. economy boomed in 1997 as households and businesses prospered under stable monetary and fiscal policies. CBO expects the economic momentum of 1997 to continue into early 1998. Beyond that, some combination of a widening trade deficit, tighter monetary policy, and moderating growth in investment and consumption is expected to slow the economy.

Households. U.S. households fared well in 1997. Propelled by vigorous growth in employment and income, and by bullish consumer confidence and stock market prices, the growth rate of consumption in 1997 is expected to match the highest rate in the current six-year expansion. Although the trend in overall stock prices has been roughly flat since midyear, the increase in wealth derived from the stock market over the past year has nevertheless been impressive. That increased wealth, together with moderately strong prospective growth in employment and income, will help consumption maintain a brisk clip well into 1998.

Figure 1-6.
The Personal Saving Rate



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: The average, over four quarters, of personal saving as a percentage of disposable personal income.

Real (inflation-adjusted) consumer spending outpaced real disposable income in 1997, sending the personal saving rate to its lowest level in five decades (see Figure 1-6). The decline in the saving rate may have been the result of the increase in wealth from the stock market, which encourages households to consume more of their disposable income and save less.

The faster growth in consumption does not appear to have placed undue stress on household finances. With growth in the value of household debt slowing and stock prices rising throughout most of 1997, the ratio of the net financial wealth of households to their disposable income reached a postwar high in the third quarter of 1997 (see Figure 1-7). Following a sudden drop in October, the stock market hit new temporary monthly highs in the fourth quarter, so net financial wealth posted large gains for the year.

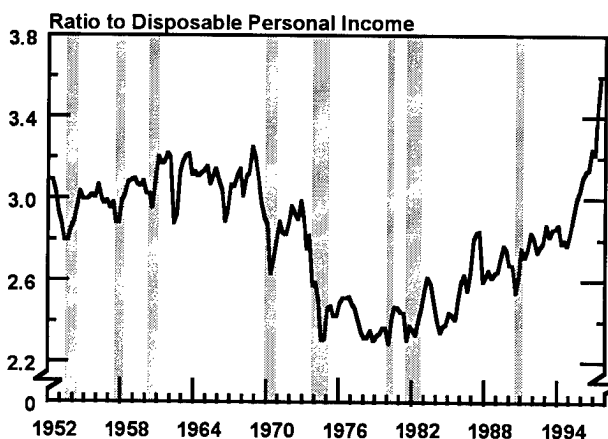
The housing sector remained strong in 1997. Total housing starts came within 1 percent of last year's eight-year high, and new home sales through the third quarter were running 6 percent above their 1996 level. That strength arose from the same favorable conditions that contributed to strong growth in consumption as well as from the downward drift in conventional mortgage rates from their second-quarter level.

Businesses. Overall, the business sector is in excellent health: balance sheets are in good shape and investment is booming. The gross after-tax cash flows of corporations climbed as profits soared and as corporate debt burdens continued the decline they began in 1991 (see Figure 1-8). Surging equity markets and more balanced programs of debt accumulation have sharply reduced the overall debt-to-equity ratio for nonfarm, nonfinancial corporations. At 50 percent, that ratio has fallen from its 1982 peak of 100 percent to a level much closer to the average that prevailed before the high inflation of the 1970s. Moreover, short-term debt has accumulated at a much more moderate pace in the 1990s than it did a decade ago.

Healthy balance sheets and robust economic growth spurred real business investment in fixed capital. Growing at a 10.4 percent clip in 1997, it has far exceeded the growth of GDP (see Figure 1-9). Moreover, its average growth over the past three years has outpaced all marks posted since the late 1970s. The surge in real investment was led by spending on equipment, which rose by more than 13 percent in 1997, a quickening of its 1996 pace and its fastest growth since 1984.

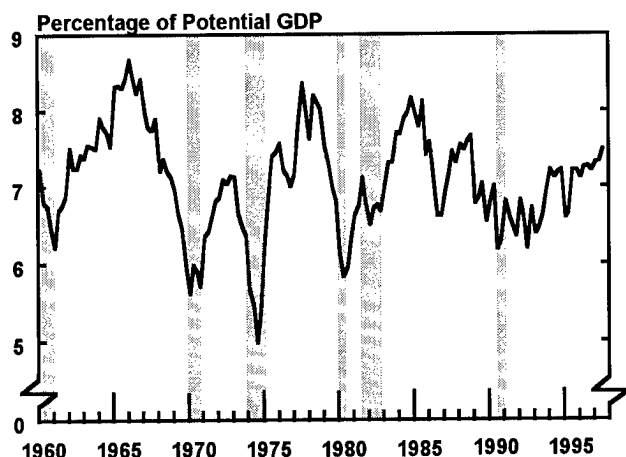
Although capital spending has shown little indication of slowing anytime soon, such rapid growth is unlikely to persist. CBO expects the pace of real business investment to slacken a little in 1998 as GDP growth

Figure 1-7.
Net Financial Wealth of Households



SOURCES: Congressional Budget Office; Federal Reserve Board; Department of Commerce, Bureau of Economic Analysis.

Figure 1-8.
Gross After-Tax Corporate Cash Flow



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

moderates and rising labor costs temper growth in business cash flows.

International. In 1997, the real trade deficit for goods and services as a share of GDP was the largest in nine years (see Figure 1-10). Robust U.S. growth and a strong dollar contributed to that increase. The U.S. trade deficit—which has expanded since 1992 as a result of a buoyant U.S. economy, lackluster foreign growth, and a strong dollar—is expected to widen further over the next few years. The Asian crisis will slow U.S. growth directly through trade with that region and indirectly by inhibiting growth in the rest of the world.

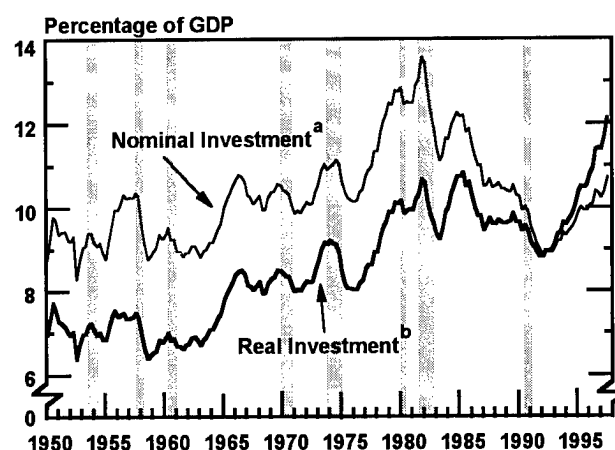
The crisis in Asia is reminiscent of the one in Mexico in late 1994 and 1995. But whereas Mexico's economy has staged a strong export-led recovery since 1996, the recovery from Asia's crisis is likely to be more prolonged for a number of reasons. First, the crisis has led to competitive devaluation among several Asian countries that export similar products, therefore making it difficult for any single country to significantly boost its imports. Second, nearly 90 percent of Mexico's exports go to the United States, which, by providing a stable market, enabled Mexico to follow an export-led recovery. By comparison, countries in East Asia send a considerable portion of their exports to Japan, which is itself in a slump and unable to absorb many more exports from its beleaguered neighbors.

Third, having learned its lessons from a 1982 debt crisis, the Mexican government was willing to undertake tough programs quickly and resolutely, a response that sped recovery. In contrast, governments in parts of Asia have responded with denial and resistance, which bodes poorly for the reforms necessary for a solid recovery.

The Asian crisis is likely to dampen growth prospects in the rest of the world in various ways. It has already scared some emerging economies in Eastern Europe and South America into tightening fiscal and monetary policies to defend their currencies from speculative attacks. For example, Brazil's central bank recently raised short-term interest rates from 22 percent to 43 percent, even though inflation was just 4.1 percent. If maintained, the high interest rates will cripple Brazil's growth. Since Brazil accounts for about half of South America's GDP and has close trade ties with its neighbors, that in turn could presage a sizable slowdown in South America.

The Asian crisis is likely to dampen growth in European countries through its effect on international trade and investment. Although only about 11 percent of the European Union's exports go to Asia (excluding

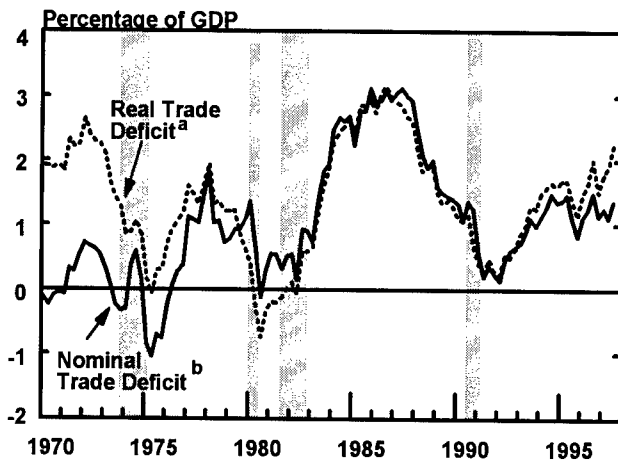
Figure 1-9.
Business Fixed Investment



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

- a. Ratio of nominal investment to nominal GDP.
- b. Ratio of real investment to real GDP, both in chained 1992 dollars.

Figure 1-10.
The U.S. Trade Deficit



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

- a. Ratio of real U.S. trade deficit to real GDP, both in chained 1992 dollars.
- b. Ratio of nominal U.S. trade deficit to nominal GDP.

Japan), its total exports account for 31 percent of its GDP. Thus, a sharp slowdown in East Asia could slow its growth. More important, the devaluation of the Korean won and the Japanese yen will make high-end exports from those countries more competitive relative to European products, raising Europe's imports while retarding its exports.

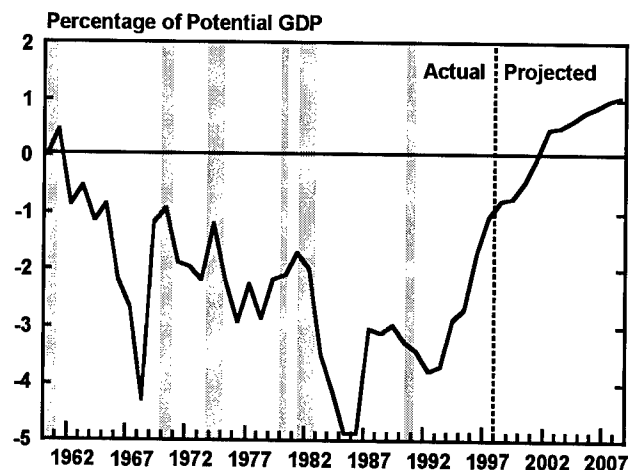
Therefore, the negative shock from East Asia further strains the uneven recoveries in continental Europe. Reductions in interest rates and the depreciation of currencies have eased monetary conditions since early 1995, stimulating an export-led recovery that gathered strength in the first half of 1997. However, encumbered by stubbornly high unemployment and tight fiscal policies, domestic demand in Europe has so far remained relatively weak. Moreover, the need to align interest rates among potential members of the European Monetary Union (EMU) has helped pressure the Bundesbank to take the lead in raising the official interest rates of four EMU candidates: Germany, France, the Netherlands, and Belgium. Additional rate hikes, which are widely anticipated in the coming year, could limit further recovery.

The impact of the Asian crisis on Canada and Mexico should be relatively muted, and their robust recoveries should continue. The export-led recoveries of those U.S. neighbors have continued to gather momentum since their deep 1995 recession and have begun to spread to domestic demand. Furthermore, their trade links with Asia are relatively small.

The Federal Budget. The budget deficit tumbled to \$22 billion in 1997 from \$107 billion in 1996, putting it at 0.3 percent of potential GDP, its lowest share since 1970. Just five years earlier—in 1992—the deficit had climbed to 4.6 percent of potential GDP. Under current budget policies, CBO estimates that the budget will be close to balance during the 1998-2000 period and will show surpluses beginning in 2001—a year earlier than planned in the Balanced Budget and Taxpayer Relief Acts of 1997.

Although tax and spending legislation has contributed to lowering the deficit over the past five years, the dramatic improvement in 1997 did not stem from recent policy changes. Instead, it largely arose from unanticipated factors that boosted revenues—strong growth in taxable compensation and corporate profits, an unusually large volume of capital gains realizations, and a rise in tax receipts relative to the income reported in the national income and product accounts.

Figure 1-11.
**The Standardized-Employment Deficit (-)
or Surplus (By fiscal year)**



SOURCE: Congressional Budget Office.

Instead of using changes in the budget deficit to measure the stance of fiscal policy, CBO uses the standardized-employment deficit. That measure removes from the federal budget the effects of cyclical fluctuations in taxable incomes and unemployment-related outlays. It also excludes the budgetary effects of financial transactions that have little if any short-term macroeconomic impact. Such transactions include outlays for deposit insurance, receipts from spectrum auctions, and shifts in outlays or receipts from one fis-

cal year to another that really shift the cash flows by just a few days. Those adjustments make changes in the standardized-employment deficit a better measure of fiscal policy than changes in the unadjusted budget deficit.

Despite the small effect of budget legislation in 1997, the standardized-employment deficit fell from 1.6 percent to 1.0 percent of potential GDP (see Figure 1-11 and Table 1-2). Ordinarily that decline would be

Table 1-2.
Measures of Fiscal Policy Under Baseline Assumptions (By fiscal year)

	Actual				Projected											
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
In Billions of Dollars																
Standardized-Employment Deficit (-) or Surplus ^a	-194	-190	-123	-80 ^b	-60	-59	-37	2	52	59	76	96	112	131	146	
Reconciliation with Budget Deficit																
Cyclical deficit	-13	2	2	34	54	43	27	10	-2	-7	-7	-8	-8	-9	-9	
Deposit insurance	8	18	8	14	5	4	3	2	2	2	1	1	1	1	1	
Timing shifts ^c	-4	-1	5	-1	-6	7	0	-5	5	0	0	-15	9	6	0	
Spectrum auctions	0	8	0	11	2	3	4	5	12	1	1	1	1	1	0	
Total Budget Deficit (-) or Surplus	-203	-164	-107	-22	-5	-2	-3	14	69	54	71	75	115	129	138	
As a Percentage of Potential GDP																
Standardized-Employment Deficit (-) or Surplus ^a	-2.8	-2.6	-1.6	-1.0 ^b	-0.7	-0.7	-0.4	0	0.5	0.6	0.7	0.8	0.9	1	1.1	
Reconciliation with Budget Deficit																
Cyclical deficit	-0.2	0	0	0.4	0.7	0.5	0.3	0.1	0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	
Deposit insurance	0.1	0.2	0.1	0.2	0.1	0	0	0	0	0	0	0	0	0	0	
Timing shifts ^c	-0.1	0	0.1	0	-0.1	0.1	0	-0.1	0.1	0	0	-0.1	0.1	0	0	
Spectrum auctions	0	0.1	0	0.1	0	0.1	0	0	0.1	0	0	0	0	0	0	
Total Budget Deficit (-) or Surplus	-3	-2.3	-1.4	-0.3	-0.1	0	0	0.1	0.7	0.5	0.7	0.7	1	1	1	
Memorandum:																
Potential GDP																
(Billions of dollars)	6,877	7,203	7,534	7,872	8,216	8,601	9,019	9,469	9,938	10,425	10,931	11,453	11,997	12,563	13,154	

SOURCE: Congressional Budget Office.

- These numbers exclude outlays for deposit insurance and offsetting receipts from spectrum auctions. They also reflect shifts in the timing of revenue collections as well as adjustments for fiscal years in which there are 11 or 13 monthly payments for various entitlement programs instead of the usual 12.
- The drop in the standardized-employment deficit in 1997 may reflect factors that raise federal revenue but do not constrain aggregate demand (see text for further discussion).
- Includes an adjustment to account for shifts in the timing of excise tax receipts and mandatory spending, as well as an adjustment for the number of payments in a fiscal year (see footnote a).

expected to have a moderately contractionary effect on the economy, even though the sources might not be traceable to recent fiscal actions. But the decline in 1997 may largely reflect factors that should not be considered restrictive to short-term growth. For example, an increase in receipts resulting from higher capital gains realizations does not impose restraint on aggregate demand.

During the forecast period, the average stance of fiscal policy is essentially neutral. CBO estimates that the standardized-employment deficit will fall to 0.7 percent of potential GDP in 1998 and stay there in 1999. From 2000 to 2002, the changes in the standardized-employment budget indicate some fiscal restraint as deficits are replaced by surpluses. Thereafter, the small annual improvements essentially indicate a neutral fiscal impact on short-term growth.

The emergence of standardized-employment surpluses will contribute to long-term growth by adding to national saving. In part, those projected surpluses reflect legislation enacted in 1997, which provides savings in federal spending that are only partially offset by reductions in revenues. Most of the spending reductions are achieved by restraining the growth of Medicare and imposing new caps on discretionary outlays. The major tax provisions include lower tax rates on capital gains, tax credits for children under 17, tax subsidies for education and savings, and an increase in the amount of wealth exempt from the estate tax. The package also includes a few tax increases such as a higher cigarette tax and an extension of the tax on airline tickets.²

Financial Markets and Monetary Policy. Despite robust economic growth during the second half of 1997, long-term interest rates fell as domestic inflation remained tame, events in foreign and domestic equity markets lessened the likelihood of further monetary tightening, and turmoil in foreign economies prompted investors to seek safety in U.S. Treasury securities. Short-term interest rates remained fairly flat during the

second half of 1997, mostly because the Federal Reserve did not change its target for the federal funds rate.

With interest rates benefiting from low inflation and the economy maintaining momentum, the stock market posted gains for the third consecutive year in 1997, with the broad-based Standard and Poor's 500 (S&P 500) index rising roughly 30 percent during the year. Concerns about developments in overseas markets and the outlook for profits in 1998, however, plagued the market during the last few months of the year.

Indicators of monetary policy are currently sending mixed messages. Given the decline in the underlying rate of inflation, the fact that the Federal Reserve has kept the target for the federal funds rate at 5.5 percent implies that monetary policy was more restrictive during the last half of 1997 than earlier in the year. However, the money supply has been growing at the top of the Federal Reserve's monitoring range, and although the Federal Reserve formally downplays the role of the money supply in assessing monetary policy, some analysts feel that its recent strong growth implies monetary ease.

The Forecast and Projection

The economic momentum of the past year will probably carry the economy through mid-1998. After that, the economy is expected to slow, and inflation is expected to rise moderately through 1999. The timing of the rise in inflation and the extent to which the economy slows are subject to particular uncertainty because of the crisis in Asia. If the crisis worsens or becomes more prolonged, prices in the United States may be held down longer and the trade deficit may widen further than CBO currently forecasts (see Box 1-3). In the medium-term projection period, 2000 through 2008, the economy will on average be slightly below its potential level of output, with inflation and interest rates leveling at their historical averages.

The Forecast for 1998 and 1999

CBO expects economic growth to slow and inflation to rise modestly through 1999. Short- and long-term interest rates are expected to be slightly higher on average

2. The provisions of the Balanced Budget Act of 1997 and the Taxpayer Relief Act of 1997 are described in Congressional Budget Office, *The Economic and Budget Outlook: An Update* (September 1997), and *Budgetary Implications of the Balanced Budget Act of 1997*, CBO Memorandum (December 1997).

over the next two years than they were in the last quarter of 1997.

Output. CBO expects real output to grow by 2.7 percent in 1998 and 2.0 percent in 1999. Actual output growth will remain above potential through the first quarter of 1998, then fall below for the rest of the forecast horizon.

The slower growth is expected to stem primarily from recent foreign developments and a drop-off in business investment. For the past year, CBO has expected inflation to rise in response to mounting pres-

ures. The widening of the U.S. trade deficit as a result of the Asian crisis, and the slackening of investment, may lessen those pressures, but whether they will be reduced enough to eliminate the need for a modest monetary tightening is unclear at this point. Thus, CBO's forecast of slower growth and an increase of 25 basis points (a quarter of a percentage point) in the target for the federal funds rate represents the average of two possible outcomes—either growth will slow on its own, or a more aggressive increase in the federal funds rate will be required.

Unemployment and Inflation. In CBO's forecast, growth in employment and the labor force continue at a steady pace through the first quarter of 1998 and then slow in tandem with final demand. The unemployment rate rises slightly, to 4.8 percent, in 1998 and then to 5.1 percent in 1999. On an annual basis, CPI inflation falls to 2.2 percent in 1998, reflecting the low rate of inflation in the last half of 1997. In 1999, it rises to 2.5 percent. Inflation as measured by the implicit GDP deflator stays at 2.0 percent in 1998 and then increases to 2.2 percent in 1999.

Pressures on inflation are likely to continue to build for at least the next two years because the unemployment rate is forecast to remain below the 5.8 percent rate estimated for the NAIRU. However, for several reasons, CBO has tempered the inflation forecast arising from its NAIRU estimate. First, the sectoral conditions that have held down inflation over the past year and a half are expected to unwind only gradually over the next two years. Second, the forecast of the inflation rate incorporates adjustments that the Bureau of Labor Statistics is expected to make to improve the accuracy of the CPI (see Box 1-2, page 8). Those adjustments will probably lower the measured CPI inflation rate through 1999 by 0.3 to 0.4 percentage points. Therefore, CBO's forecast of a modest rise in CPI inflation, to 2.7 percent by early 2000, indicates a steeper rise in the inflation rate calculated excluding the technical adjustments (see Figure 1-12). Third, the recent, subdued behavior of inflation has increased the uncertainty associated with measures of demand pressures, so CBO's inflation forecast is slightly lower than what is indicated by its NAIRU estimate.

Differences between the GDP-based and CPI measures of inflation affect budget forecasts. Indexed budget programs and personal income tax brackets are tied

Box 1-3.

Recent Developments and the Forecast

The Congressional Budget Office completed its economic forecast in early December to allow time to compute the budget calculations that depend on it. Although the forecast does not reflect the economic data that have become available since then, less than two months of additional data would not justify significant changes in the economic outlook.

Most of the important unanticipated events since early December have involved the consequences flowing from the crisis in Asia. The situation appears to have deteriorated more than anticipated. The dollar has risen sharply, partly reflecting the weakness of the Asian currencies and partly as the result of a more general "flight to quality" as investors have sought a safer place to put their money. That flow of capital to the United States may also have contributed to a drop in rates on longer-term U.S. government securities.

Those events, if they persist, suggest a further postponement of the point at which inflation begins to rise: the dollar's appreciation would keep import prices falling, and weakening Asian economies would further increase the real trade deficit and dampen demand for U.S. goods and services. In that case, the probability that the Federal Reserve will raise interest rates in the next few months—a probability that receives some weight in CBO's forecast—would diminish. However, some increase in interest rates remains in the cards once the crisis has begun to peter out.

Developments in Asia remain hard to predict. If the crisis leads to credible changes in the inappropriate policies some countries have pursued, the speculative attack on currencies could end quickly. However, politically feasible policy changes and support from international agencies may not suffice (see Box 1-1, page 4).

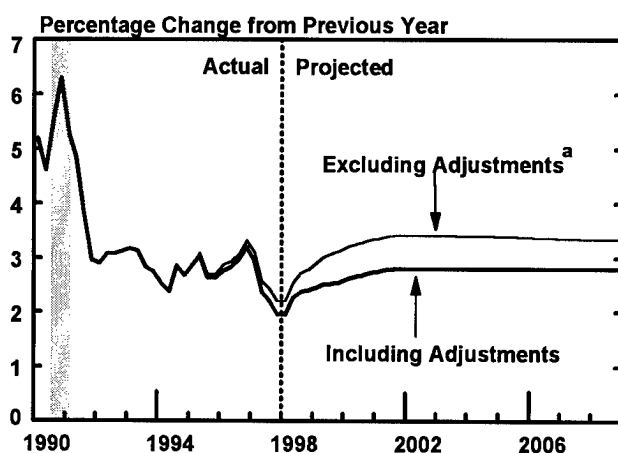
to inflation in the CPI, whereas overall incomes (and therefore the tax base) are most directly influenced by changes in the implicit GDP deflator. For a given rate of inflation in the implicit GDP deflator, a higher rate in CPI inflation implies a higher deficit. Over the past 20 years, inflation in the CPI has exceeded that in the GDP deflator by an average of 0.4 percentage points. CBO expects that difference to decline to 0.3 percentage points through 1999.

Interest Rates. In CBO's forecast, short-term interest rates rise modestly in 1998. The rate on the three-month Treasury bill inches up to 5.4 percent by the end of that year in response to the expected increase in the Federal Reserve's target for the federal funds rate. The bill rate then falls back to 5.1 percent by the end of 1999 as economic growth slows. The rate on 10-year Treasury notes increases to 6.1 percent by the end of 1998 and remains at that level through 1999.

The Projections for 2000 Through 2008

CBO projects that annual growth in real GDP will average 2.1 percent during the 2000-2008 period, slightly below the 2.3 percent growth rate of potential GDP.

Figure 1-12.
Inflation Including and Excluding Technical
Adjustments in the CPI



SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

- a. This measure of inflation excludes CBO's estimate of the effects of the Bureau of Labor Statistics' technical adjustments in the consumer price index for all urban consumers.

Over that same period, the unemployment rate is projected to rise to 5.9 percent, and inflation measured by the CPI is projected to average 2.8 percent.

CBO does not try to project cyclical movements in the economy from 2000 to 2008 but instead attempts to approximate typical relationships—taking account of the possibility of booms and recessions. CBO uses historical data to identify trends in factors underlying the economy—factors such as the growth of the labor force, the rate of national saving, and the growth of productivity. The projections of real GDP, inflation, and real interest rates depend on those underlying trends.

Output. CBO's forecast for economic growth through 1999 leaves real GDP about 1 percent above the estimated level of potential GDP. The forecast assumes that growth of real GDP will be slightly slower than that of potential GDP during the medium term—2.1 percent a year on average—which allows the GDP gap to return to its historical average of 0.2 percent. Once historical norms are restored, real GDP is expected to grow at the same rate as potential GDP.

As was the case last summer, the current projection for economic growth includes a technical adjustment to allow for changes in the method for calculating the CPI that the BLS will implement in 1999. Those changes will reduce measured rates of inflation—an effect that is included in CBO's projection for both the CPI and the implicit GDP deflator. But they will have no impact on the future growth of total expenditures in the economy and, therefore, no effect on CBO's projection for nominal GDP. Lower inflation and the same nominal GDP mean higher real GDP. Therefore, CBO adjusts its projection for potential GDP upward by the same amount that the technical changes adjust downward. That adjustment raises GDP growth by an average of 0.2 percentage points annually between 1997 and 2008.

Even allowing for the technical adjustment, the growth of potential output is slightly higher in the projection than it was between 1990 and 1996 (see Tables 1-3, 1-4 and 1-5). Faster growth arises mainly from faster growth in labor productivity, which is expected to advance at a 1.5 percent annual rate between 1997 and 2008, about half a percentage point faster than between 1990 and 1996. Rapid growth in productivity stems largely from the high level of capital during the forecast and projection periods—a legacy of the recent boom in investment spending.

Unemployment and Inflation. Although growth slows during 1998 and 1999 in CBO's forecast, the unemployment rate, at 5.1 percent, remains below CBO's estimate of the NAIRU in 1999. Reflecting below-trend economic growth, the unemployment rate drifts upward from 2000 to 2002, then levels off at 5.9 percent in 2003 and thereafter. That rate is consistent with the average historical relationship between actual and potential GDP.

CBO assumes that the rate of inflation will increase to 2.8 percent by 2001 and then remain flat for the rest of the projection period. From 2001 to 2008, inflation in the CPI will average 2.8 percent a year compared with 2.5 percent in the implicit GDP deflator.

Interest Rates. For the years after 1999, CBO projects interest rates by making real interest rates move toward their historical averages, after taking account of

Table 1-3.
Accounting for Growth in Real GDP (Average annual rate of growth, in percent)

	Actual					Projected	
	1960-1997	1960-1973	1973-1981	1981-1990	1990-1997	1997-2002	2002-2008
Civilian Labor Force	1.8	1.9	2.5	1.6	1.1	1.1	1.0
Plus Civilian Employment Rate	0	0.1	-0.4	0.2	0.1	-0.2	0
Equals Civilian Employment	1.8	2.0	2.1	1.9	1.2	0.9	0.9
Plus Nonfarm Hours per Civilian Employee	0.1	0.2	-0.4	0	0.5	0.1	0
Equals Total Hours (Nonfarm business)	1.9	2.2	1.7	1.9	1.8	1.0	1.0
Plus Output per Hour (Nonfarm business)	1.5	2.5	0.7	1.2	0.9	1.4	1.5
Equals Nonfarm Business Output	3.4	4.7	2.4	3.2	2.6	2.4	2.5
Minus Nonfarm Business Output Share of GDP	0.3	0.4	0	0.2	0.4	0.2	0.3
Equals Real GDP	3.2	4.3	2.4	3.0	2.3	2.1	2.2
Plus Ratio of Potential to Actual GDP ^a	-0.1	-0.4	-0.8	-0.4	-0.2	0.3	0
Plus Technical Adjustments ^b	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.2
Equals Potential GDP ^a	3.1	3.9	3.2	2.6	2.1	2.5	2.2

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics.

NOTES: The years marking the ends of the historical intervals are years in which the business cycle peaked. The indicated arithmetical relationships may not hold exactly because of rounding.

n.a. = not applicable.

a. Estimated by CBO.

b. This line reports the effect of recent technical adjustments in the CPI on the growth of potential output.

any factors that might make the early years of the next century different from the entire postwar period. Conceptually, real interest rates measure the payments to lenders for the use of their funds after adjusting for

changes in purchasing power that result from inflation. In the long run, the level of the real rate will be determined by many factors, including productivity and the government's monetary and fiscal policies.

Table 1-4.
CBO Economic Projections, Calendar Years 1998-2008

	Estimate 1997 ^a	Forecast		Projected								
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nominal GDP (Billions of dollars)	8,081	8,461	8,818	9,195	9,605	10,046	10,529	11,038	11,565	12,112	12,684	13,280
Nominal GDP (Percentage change)	5.8	4.7	4.2	4.3	4.5	4.6	4.8	4.8	4.8	4.7	4.7	4.7
Real GDP (Percentage change)	3.7	2.7	2.0	1.9	2.0	2.1	2.3	2.3	2.2	2.2	2.2	2.1
Implicit GDP Deflator ^b (Percentage change)	2.0	2.0	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
Consumer Price Index ^c (Percentage change)	2.3	2.2	2.5	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Unemployment Rate (Percent)	5.0	4.8	5.1	5.4	5.6	5.8	5.9	5.9	5.9	5.9	5.9	5.9
Three-Month Treasury Bill Rate (Percent)	5.1	5.3	5.2	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	6.4	6.0	6.1	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Tax Bases (Billions of dollars)												
Corporate profits ^d	799	819	808	811	820	839	868	898	925	957	989	1029
Wage and salary disbursements	3,877	4,092	4,279	4,469	4,666	4,882	5,122	5,376	5,638	5,908	6,191	6,485
Other taxable income	1,785	1,848	1,900	1,954	2,027	2,102	2,180	2,264	2,354	2,448	2,546	2,653
Tax Bases (Percentage of GDP)												
Corporate profits ^d	9.9	9.7	9.2	8.8	8.5	8.3	8.2	8.1	8.0	7.9	7.8	7.7
Wage and salary disbursements	48.0	48.4	48.5	48.6	48.6	48.6	48.6	48.7	48.8	48.8	48.8	48.8
Other taxable income	22.1	21.8	21.5	21.2	21.1	20.9	20.7	20.5	20.4	20.2	20.1	20.0

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Estimates of nominal GDP, real GDP, and the implicit GDP deflator are based on data for the first three quarters of 1997 published November 26, 1997, and CBO's expectation for the fourth quarter of 1997. The consumer price index, the unemployment rate, the three-month Treasury bill rate, and the 10-year Treasury note rate are actual values for 1997.

b. The implicit GDP deflator is virtually the same as the GDP price index.

c. The consumer price index for all urban consumers.

d. Corporate profits are the profits of corporations, adjusted to remove the distortions in depreciation allowances caused by tax rules and to exclude capital gains on inventories.

Empirical estimates of real rates, however, are complicated by recent and prospective technical changes in the CPI. Because of those changes, future inflation rates are not strictly comparable with historical averages. Using the consistently measured price index shown in Figure 1-12, the projected real rate on

10-year Treasury notes averages 2.5 percent between 2000 and 2008. Similarly, the projected real rate on three-month Treasury bills averages 1.3 percent during that period. Both short- and long-term real interest rates are expected to be well below their post-1960 average. However, they are higher than the rates experi-

Table 1-5.
CBO Economic Projections, Fiscal Years 1998-2008

	Actual 1997	Forecast		Projected								
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nominal GDP (Billions of dollars)	7,972	8,369	8,729	9,097	9,499	9,933	10,405	10,909	11,431	11,973	12,539	13,129
Nominal GDP (Percentage change)	5.8	5.0	4.3	4.2	4.4	4.6	4.8	4.9	4.8	4.7	4.7	4.7
Real GDP (Percentage change)	3.7	3.0	2.1	1.9	2.0	2.1	2.3	2.3	2.3	2.2	2.2	2.1
Implicit GDP Deflator ^a (Percentage change)	2.1	1.9	2.2	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5
Consumer Price Index ^b (Percentage change)	2.7	2.1	2.5	2.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Unemployment Rate (Percent)	5.1	4.7	5.0	5.3	5.6	5.8	5.9	5.9	5.9	5.9	5.9	5.9
Three-Month Treasury Bill Rate (Percent)	5.0	5.3	5.3	4.9	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	6.5	5.9	6.1	6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Tax Bases (Billions of dollars)												
Corporate profits ^c	785	817	810	809	817	832	861	891	917	950	980	1,019
Wage and salary disbursements	3,811	4,045	4,235	4,421	4,616	4,826	5,060	5,312	5,572	5,840	6,120	6,410
Other taxable income	1,762	1,836	1,887	1,939	2,007	2,083	2,160	2,243	2,331	2,424	2,520	2,626
Tax Bases (Percentage of GDP)												
Corporate profits ^c	9.8	9.8	9.3	8.9	8.6	8.4	8.3	8.2	8.0	7.9	7.8	7.8
Wage and salary disbursements	47.8	48.3	48.5	48.6	48.6	48.6	48.6	48.7	48.7	48.8	48.8	48.8
Other taxable income	22.1	21.9	21.6	21.3	21.1	21.0	20.8	20.6	20.4	20.2	20.1	20.0

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. The implicit GDP deflator is virtually the same as the GDP price index.

b. The consumer price index for all urban consumers.

c. Corporate profits are the profits of corporations, adjusted to remove the distortions in depreciation allowances caused by tax rules and to exclude capital gains on inventories.

enced in the 1950s and early 1960s, when domestic conditions were comparable—low inflation and budgets near balance—but government debt around the world was substantially lower than it is now.

Income Shares Subject to Taxation

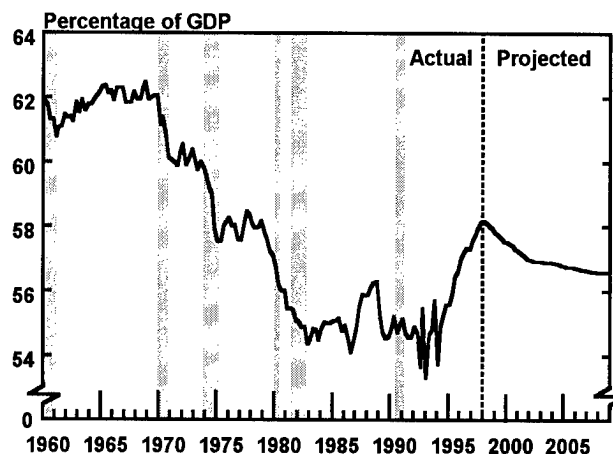
Economic activity can be measured as the sum of output produced (measured as GDP) or the sum of all income generated in producing that output (measured as gross domestic income, or GDI). Estimates of future deficits are affected by the projected size of total income and by the projected distribution of income among various categories. The income distribution matters because different types of income are taxed at different effective rates: not only do statutory rates vary across incomes, but some types of income are exempt from taxation.

Wage and salary disbursements and corporate profits are the most important income categories for revenue projections because they are taxed at the highest effective rates and are the two largest categories of income subject to taxation. As a share of GDP, those two categories have risen sharply, from 56 percent at the end of 1994 to 58 percent at the end of 1997 (see Figure 1-13). In CBO's projection, however, their share declines steadily, reaching 56.5 percent in 2008, although the decline is entirely explained by a drop in the share of corporate profits.

One reason for the decline in the share of GDP paid in the form of wages and salaries and profits is that overall income (GDI) is projected to grow more slowly than overall output (GDP) during the 1998-2008 period. In principle, those measures should be identical, but in practice they often vary because they use different data sources. Indeed, growth in GDI has far exceeded growth in GDP for the past three years, leaving GDI an estimated \$100 billion higher than GDP at the end of 1997. CBO assumes that disparity will shrink as a percentage of GDP, which implies that GDI will grow more slowly than GDP between 1998 and 2008.

The share of GDP paid in the form of wages and salaries rises modestly in CBO's forecast and projections, from 48.4 percent in 1998 to 48.8 percent in 2005. Employee compensation includes wages and salaries as well as employer-provided fringe benefits—

Figure 1-13.
Wages and Salaries Plus Corporate Profits



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: Corporate profits are the profits of corporations, adjusted to remove the distortions in depreciation allowances caused by tax rules and to exclude capital gains on inventories.

such as medical premiums and pension contributions—and employers' contributions for social insurance. CBO projects an increase in the share of fringe benefits and a mild increase in the share for employers' contributions for social insurance, boosting the projection for the compensation share from 58.5 percent in 1998 to 59.2 percent in 2008.

The share of GDP paid in the form of corporate profits falls steadily from its current level of 9.9 percent to 7.7 percent in 2008. The primary reason for the decline is a projected increase in the share of GDP devoted to depreciation (wear and tear on business equipment and structures), which stems from the recent boom in investment. Since depreciation is not taxed, that increase in its share tends to depress the taxable share of gross income.

Changes in the Economic Outlook Since January 1997

CBO published a forecast of the economy in January 1997 that was used to support the 1997 budget resolution. That forecast was updated in September (see

Table 1-6). Differences between those forecasts primarily reflect the new information that has become available during the past year, especially the persistent high growth of the economy and low inflation rates.

Growth in real GDP was much stronger in 1997 than CBO expected in January 1997—3.7 percent rather than 2.3 percent. Therefore, CBO made a slight upward revision in its forecast for 1998. Revisions in subsequent years are smaller, mostly because of the

slightly higher estimate of the potential growth of the economy.

Inflation was much lower in 1997 than the January report anticipated, a fact that became clear by midyear. However, CBO's September report attributed the slowing in inflation in 1997 to temporary factors and so did not much alter the longer-run projection of inflation. In the current forecast, CBO puts more weight on the possibility that part of the recent decline in inflation re-

Table 1-6.
Comparison of CBO Economic Projections, Calendar Years 1998-2008

	Estimate ^a 1997	Forecast		Projected								
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nominal GDP												
(Billions of dollars)												
January 1998	8,081	8,461	8,818	9,195	9,605	10,046	10,529	11,038	11,565	12,112	12,684	13,280
September 1997	8,053	8,415	8,802	9,223	9,672	10,165	10,684	11,227	11,794	12,388	13,011	n.a.
January 1997	7,916	8,277	8,678	9,097	9,532	9,984	10,453	10,983	11,443	11,969	12,518	n.a.
Nominal GDP												
(Percentage change)												
January 1998	5.8	4.7	4.2	4.3	4.5	4.6	4.8	4.8	4.8	4.7	4.7	4.7
September 1997	5.5	4.5	4.6	4.8	4.9	5.1	5.1	5.1	5.1	5.0	5.0	n.a.
January 1997	4.6	4.6	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.6	4.6	n.a.
Real GDP												
(Percentage change)												
January 1998	3.7	2.7	2.0	1.9	2.0	2.1	2.3	2.3	2.2	2.2	2.2	2.1
September 1997	3.4	2.1	1.9	2.1	2.2	2.4	2.4	2.4	2.3	2.3	2.3	n.a.
January 1997	2.3	2.0	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	n.a.
Implicit GDP Deflator^b												
(Percentage change)												
January 1998	2.0	2.0	2.2	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
September 1997	2.0	2.4	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	n.a.
January 1997	2.3	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	n.a.
Consumer Price Index^c												
(Percentage change)												
January 1998	2.3	2.2	2.5	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
September 1997	2.4	2.7	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	n.a.
January 1997	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1	n.a.

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

NOTES: Percentage change is year over year.

n.a. = not applicable.

flects more permanent factors; projected inflation therefore falls by a few tenths of a percentage point. Since forthcoming technical adjustments in the CPI were incorporated in the September forecast, they do not affect the recent changes in the inflation forecast.

CBO's projections of interest rates are similar to those made last January. In 1997, interest rates were much as CBO anticipated, giving little cause for revision. However, the projected long-term rates are

slightly lower on average than last January's projection (reflecting the lower anticipated inflation), and the projected yield curve is slightly flatter (short-term rates are higher relative to long-term rates). CBO's September projections for interest rates, which were lower, assumed that real rates would return to those prevailing in the 1950s and 1960s—the last time inflation was persistently low. CBO has revisited that argument, however, and now expects somewhat higher interest rates

Table 1-6.
Continued

	Estimate ^a 1997	Forecast		Projected								
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Unemployment												
Rate (Percent)												
January 1998	5.0	4.8	5.1	5.4	5.6	5.8	5.9	5.9	5.9	5.9	5.9	5.9
September 1997	5.0	5.1	5.5	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	n.a.
January 1997	5.3	5.6	5.8	5.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	n.a.
Three-Month Treasury												
Bill Rate (Percent)												
January 1998	5.1	5.3	5.2	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
September 1997	5.4	5.4	4.7	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	n.a.
January 1997	5.0	5.0	4.9	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	n.a.
Ten-Year Treasury												
Note Rate (Percent)												
January 1998	6.4	6.0	6.1	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
September 1997	6.4	6.2	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	n.a.
January 1997	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	n.a.
Tax Bases												
(Percentage of GDP)												
Corporate profits^d												
January 1998	9.9	9.7	9.2	8.8	8.5	8.4	8.3	8.1	8.0	7.9	7.8	7.7
September 1997	9.5	9.1	8.8	8.6	8.3	8.1	8.0	7.9	7.8	7.7	7.7	n.a.
January 1997	8.3	8.2	8.0	7.8	7.6	7.5	7.5	7.4	7.4	7.4	7.4	n.a.
Wages and salaries												
January 1998	48.0	48.4	48.5	48.6	48.6	48.6	48.6	48.7	48.8	48.8	48.8	48.8
September 1997	48.0	48.2	48.2	48.2	48.2	48.2	48.3	48.3	48.3	48.3	48.4	n.a.
January 1997	48.0	47.7	47.6	47.4	47.3	47.3	47.2	47.2	47.1	47.1	47.1	n.a.

a. Estimates of nominal GDP, real GDP, and the implicit GDP deflator are based on data for the first three quarters of 1997 published November 26, 1997, and CBO's expectation for the fourth quarter of 1997. The consumer price index, the unemployment rate, the three-month Treasury bill rate, and the 10-year Treasury note rate are actual values for 1997.

b. The implicit GDP deflator is virtually the same as the GDP price index.

c. The consumer price index for all urban consumers.

d. Corporate profits are the profits of corporations, adjusted to remove the distortions in depreciation allowances caused by tax rules and to exclude capital gains on inventories.

based on higher levels of government debt around the world as compared with those in the 1950s and 1960s.

The startling real growth in 1997 outweighed the lower inflation, pushing nominal GDP higher than CBO had anticipated. The current projection for nominal GDP remains above last January's forecast through 2007 but, because of the downward revision in expected inflation, is lower than CBO's September projections for 2000 and beyond.

CBO's view of the two most important tax bases—corporate profits and wages and salaries—has changed over the past year. The January 1997 estimate of the share of wages and salaries in GDP in 1997 was close to the actual share, but CBO significantly underestimated corporate profits. The current projections of the shares of both wages and salaries and corporate profits are substantially higher than last January's forecast and somewhat higher than September's forecast.

The upward revision in the projected shares reflects several factors. A change in the data for depreciation allowances substantially increased corporate profits, although that increase has no consequence for taxable depreciation or the tax estimates. Second, reported aggregate income (wages, profits, proprietors' income, rent, interest, and so on) exceeded GDP by about \$100 billion at the end of 1997. Previous forecasts assumed a discrepancy only half as large. Third, the new data on depreciation allowances suggest that they will grow more slowly than previously projected. Those allowances are not taxable and displace other forms of income. Finally, CBO now projects slightly lower growth in untaxed fringe benefits.

Past Mistakes and Future Risks

Economic activity, and therefore budget outcomes, will surely differ from CBO's forecast and projections. Last year's surprisingly favorable economic conditions and declining deficit dramatically illustrate such risks. Although the consensus of private forecasts coincides with CBO's, the individual forecasts vary widely. Current developments on both the international and domestic front pose risks to the current outlook.

The 1997 Deficit Surprise

Economic and budget surprises of the magnitude experienced in 1997 are relatively rare and are not expected to be repeated soon. But given the low budget deficits and surpluses projected through 2008, even a small, unexpected development in the economy would produce politically significant changes in the budget outlook. Slightly higher growth could easily turn projected deficits into surpluses. Conversely, slightly lower growth could turn surpluses into deficits. It is therefore important to analyze the role that favorable economic events played in the deficit surprise and how those events changed the economic outlook.

Of the \$100 billion error in CBO's January 1997 estimate of the deficit for 1997, about \$23 billion stemmed from an overly pessimistic economic outlook. (Other factors underlying the shrinking deficit are explained in Chapters 2, 3, and 4.) CBO misjudged both the persistence of the sectoral conditions holding down inflation and the underlying strength of both investment and the consumption of durable goods. The forecast assumed that inflation would edge up slightly during 1997, encouraging a modest tightening by the Federal Reserve, and that the monetary restraint, together with a cyclical slowing of investment, would cause growth to ease during the year. The Federal Reserve did raise interest rates slightly, but declining import and computer prices, as well as continued moderation in medical care prices, undercut the need for further monetary restraint. CBO expected the core CPI inflation (CPI less food and energy) to rise from its 1996 rate of 2.7 percent to 2.9 percent in 1997, but instead it fell to 2.4 percent. In addition, consumption rebounded from its late-1996 slowdown, and investment, instead of slowing, surged again in mid-1997.

One of the biggest surprises from a budgetary perspective was the continued rise in the share of taxable income in 1997. A number of economic events contributed to that rise. Continued growth of managed care reduced the share of benefits in total labor compensation, thus increasing the share of compensation subject to taxation. Low interest rates and low debt financing raised the share of firms' income subject to taxation. CBO expected wages and profits as a share of GDP to fall to 56.3 percent in 1997. Instead, it rose to 58 percent—a 19-year high.

About a quarter of the unexpected decline in the budget deficit in 1997 was the result of the confluence of those favorable economic factors. The likelihood that those factors will persist, however, is very low. CBO currently forecasts slower growth and higher inflation. The factors that helped boost the taxable share of income are also expected to unwind. As is always the case, the economy could depart from CBO's forecast and projections, generating conditions that are more—or less—favorable to the budget outlook.

The Range of Private Forecasts

CBO's economic forecast represents one of many possible views about how economic activity will evolve over the next two years. That view is close to the *Blue Chip* consensus—an average of the forecasts produced by approximately 40 to 50 private-sector economists. But even among those economists, diverse views about the economy are reflected in the wide range of individual forecasts. The average of the 10 highest forecasts for real growth, inflation, and interest rates for 1998 through 1999 are all roughly a percentage point above the average of the 10 lowest forecasts for those variables (see Table 1-7).

The uncertainty surrounding the current forecasts is likely to be much greater than the diverse estimates suggest. Forecasters report their estimate of the most probable outcome but recognize that a range of risks accompanies their forecasts. Those risks, though not explicitly mentioned in the reported forecasts, can imply much greater uncertainty than the range of published forecasts indicates.

Risks to the Current Outlook

Although one cannot anticipate all of the risks to the economic outlook, developments in the international and domestic economies warrant close attention over the coming months. In particular, a further spreading or deepening of the Asian crisis, or a sudden increase in domestic inflation accompanied by a severe monetary tightening, pose potentially large risks to the economic outlook and therefore to the budget outlook. Other risks, both positive and negative, may also arise.

International Risks. Embodied in CBO's forecast is the assumption that the currency and banking crisis in East Asia will produce a modest drag on the U.S. economy over the next two years. The accuracy of the assumption will depend on the severity of the evolving crisis, which in turn hinges critically on whether the affected economies can regain the confidence of financial markets. The performance of Japan's economy over the coming year will also play an important role in the outcome of the crisis. If Japan's economy, which has flirted with recession over the past six years, tips into an economic decline, it will further depress the other economies of East Asia. If the crisis worsens or spreads further, its impact could send the U.S. economy into recession. Given the fact that the crisis is deeper and more widespread than analysts anticipated only a short time ago, it would be imprudent to belittle the downside risk.

Another risk lurking in the wings pertains to the European Union's move to a single currency in 1999. The effort by a group of otherwise independent nations to establish a single currency and a single monetary authority is unprecedented. Consequently, it is difficult to predict what effect that will have on the international trade and financial system. No specific risk is associated with the move, but it clearly increases the uncertainty surrounding CBO's economic outlook.

The Inflation Risk. The reaction of the Federal Reserve to any signs of increasing inflation will also affect the path of the economy over the coming year. A recession is more likely if inflation rises more quickly than expected or if the Federal Reserve delays action because of the potentially negative impact on still-fragile financial markets, only to be forced into a more severe monetary tightening later on. Ill-timed monetary restraint has often precipitated recessions in the past.

Other Risks. There are other risks, some positive and some negative. If CBO has understated the growth rate of productivity, the path of capital investment, or the growth of the labor supply, then it has also understated growth in potential output. A combination of any of those factors would imply that the economy could continue to grow at a faster rate without cranking up inflation.

Table 1-7.
Comparison of CBO and *Blue Chip* Forecasts for 1998 and 1999 (In percent)

	Estimate 1997 ^a	Forecast	
		1998	1999
Growth of Nominal GDP			
<i>Blue Chip</i> High 10	n.a.	5.1	5.2
CBO	5.8	4.7	4.2
<i>Blue Chip</i> Consensus	5.8	4.5	4.6
<i>Blue Chip</i> Low 10	n.a.	3.9	3.9
Growth of Real GDP			
<i>Blue Chip</i> High 10	n.a.	2.9	2.9
CBO	3.7	2.7	2.0
<i>Blue Chip</i> Consensus	3.7	2.5	2.3
<i>Blue Chip</i> Low 10	n.a.	2.1	1.7
Growth of Implicit GDP Deflator ^b			
<i>Blue Chip</i> High 10	n.a.	2.3	2.8
CBO	2.0	2.0	2.2
<i>Blue Chip</i> Consensus	2.0	1.9	2.3
<i>Blue Chip</i> Low 10	n.a.	1.5	1.7
Growth of CPI ^c			
<i>Blue Chip</i> High 10	n.a.	2.6	3.1
CBO	2.3	2.2	2.5
<i>Blue Chip</i> Consensus	2.3	2.2	2.6
<i>Blue Chip</i> Low 10	n.a.	1.6	2.1
Unemployment Rate			
<i>Blue Chip</i> High 10	n.a.	5.1	5.4
CBO	5.0	4.8	5.1
<i>Blue Chip</i> Consensus	5.0	4.8	5.0
<i>Blue Chip</i> Low 10	n.a.	4.5	4.6
Three-Month Treasury Bill Rate			
<i>Blue Chip</i> High 10	n.a.	5.5	5.7
CBO	5.1	5.3	5.2
<i>Blue Chip</i> Consensus	5.1	5.1	5.1
<i>Blue Chip</i> Low 10	n.a.	4.8	4.7
Ten-Year Treasury Note Rate			
<i>Blue Chip</i> High 10	n.a.	6.3	6.4
CBO	6.4	6.0	6.1
<i>Blue Chip</i> Consensus	6.4	5.9	6.0
<i>Blue Chip</i> Low 10	n.a.	5.5	5.5

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board; Capitol Publications, Inc., *Blue Chip Economic Indicators* (January 10, 1998).

NOTES: The *Blue Chip* High 10 is the average of the 10 highest *Blue Chip* forecasts. The *Blue Chip* Consensus is the average of all 50 *Blue Chip* forecasts. The *Blue Chip* Low 10 is the average of the 10 lowest *Blue Chip* forecasts.
n.a. = not available.

- Estimates of nominal GDP, real GDP, and the implicit GDP deflator are based on data for the first three quarters of 1997 published November 26, 1997, and CBO's expectation for the fourth quarter of 1997. The consumer price index, the unemployment rate, the three-month Treasury bill rate, and the 10-year Treasury note rate are actual values for 1997.
- CBO reports the implicit GDP deflator, which equals the ratio of nominal GDP to real GDP. *Blue Chip* reports the GDP price index, which is virtually the same as the deflator.
- The consumer price index for all urban consumers.

On the negative side, the stock market could plummet. Its spectacular rise during the past year has pushed the earnings yield (earnings as a percentage of price) on the Standard & Poor's 500 index below the yield on safe assets. That situation is rare and usually occurs near the end of an economic expansion or just before a decline in the stock market.

The effect of a plunge in stock prices is uncertain. If they decline in isolation from other negative events, they may have little impact on the economy. Based on the experience of the 1987 stock market crash, when the S&P 500 index plunged 26 percent in one day, large corrections by themselves need not severely affect overall economic activity. They may, however, if the stock market declines in conjunction with other negative shocks—for example, from the financial situation abroad or a loss of confidence on the part of domestic consumers.

Another risk is that CBO's forecast for income growth may be too optimistic. As discussed above, CBO forecasts a continuation of the current gap between the income and expenditure measures of overall economic activity. A narrowing of that gap would imply that measured incomes are growing more slowly than measured expenditures, thus holding the growth of revenues below the rate in CBO's baseline forecast.

Although the exact nature and magnitude of risk are uncertain, the following facts should be kept in mind. First, forecast errors are inevitable. The economy is too complex to forecast perfectly. Second, the possibility of error grows over time. CBO's projection of the economy through 2008 is much less certain than its forecast for 1998. Finally, if the economy departs from the forecast and projections, so will the budget deficit. As mentioned before, a typical boom or recession can push the deficit lower or higher by well over \$100 billion in a single year.

The Budget Outlook

The federal budget is expected to be virtually balanced in 1998 and is likely to remain so for several years—assuming that current policies do not change and the economy stays on the projected course. Surging revenues stemming from rapid growth in personal income and corporate profits, realizations of capital gains, and a rise in effective tax rates, along with lower outlays for a variety of entitlement programs, have improved the fiscal picture much more rapidly than anyone had predicted.

Although the Congressional Budget Office is projecting tiny deficits for the next three years until surplus is reached in 2001, very slight differences from CBO's assumptions could easily push the budget into surplus this year or prolong deficits beyond 2001. On the one hand, an economy that is weaker than anticipated or entitlement spending that grows more rapidly than expected could quickly drive deficits back up. Additionally, maintaining for another five years the virtual freeze on discretionary spending required by the Balanced Budget Act of 1997 may be difficult in the face of pressure to increase outlays in such areas as transportation infrastructure, science and technology, and the replacement of aging military equipment. Pay-as-you-go strictures may also prove vulnerable to the desire to use projected surpluses for lowering taxes or enhancing benefits. On the other hand, continued robust economic growth or other factors could easily generate a surplus in 1998. In any case, deficits or surpluses over the next several years that differ by \$100 billion from current projections are entirely possible.

The improvement in the budget outlook relative to CBO's September 1997 projections is almost entirely a result of economic and other, so-called technical, fac-

tors—very little legislation with budgetary impact has been enacted since that time. The strong economy is expected to continue to have a positive influence on the federal budget over the next couple of years. For example, the greater projected strength of the economy helps boost CBO's estimate of revenues by \$16 billion in 1998 and \$21 billion in 1999 compared with the projections of four months ago in *The Economic and Budget Outlook: An Update*. At the same time, lower rates of inflation and unemployment than were previously projected contribute to smaller estimates of federal outlays.

The improved economy is a key element in the current outlook, but other forces play a role as well. On the revenue side, the increase witnessed recently is attributable not only to changes in total income but also to such factors as capital gains realizations. CBO expects those factors to continue to affect revenues, although not as strongly, throughout the projection period, leading to upward revisions of \$6 billion to \$14 billion a year compared with the September 1997 figures. On the outlay side, CBO has revised downward its projected spending for almost all large entitlement programs because of declining caseloads and other reasons.

Outlook for the Deficit or Surplus

The total budget measures the federal government's net transactions with the public. A deficit indicates that in any one year, the government paid more to the public

than it collected in taxes and other receipts; a surplus means that total revenues exceeded total outlays. When the budget is in deficit, the government covers the shortfall primarily by borrowing from the public. Conversely, a surplus allows borrowing to be repaid.

The Total Deficit or Surplus

Last year's total deficit was \$22 billion, the lowest recorded since 1974 and the fifth year in a row that the deficit has declined. If today's policies remain unchanged, CBO expects that trend to continue, with single-digit deficits over the next three years followed by modest, but growing, surpluses through 2008 (see Table 2-1).

Total revenues were nearly \$1.6 trillion in 1997. Meanwhile, outlays were just a tad above that mark, thereby generating the \$22 billion deficit. CBO projects that growth in revenues from 1998 through 2008 will average about 4.3 percent annually, totaling \$2.5 trillion at the end of that time. Outlays are anticipated to grow somewhat more slowly—by 3.7 percent annually over the period. By 2008, outlays are expected to total \$2.4 trillion. With revenue growth outstripping that of outlays from now until the end of the projection period, CBO's baseline shows a surplus of \$138 billion by 2008. (Chapter 3 provides a fuller discussion of revenues, and Chapter 4 presents CBO's spending outlook.)

Discretionary Spending and the Caps. Since 1991, spending from annual appropriation acts has been restrained by statutory limits, or caps. The estimates in Table 2-1 assume that the Congress adheres to those caps on discretionary spending through 2002. Originally established by the Budget Enforcement Act of 1990 for the period from 1991 through 1995, the caps were modified and extended through 1998 by the Omnibus Budget Reconciliation Act of 1993. The Balanced Budget Act continued the caps on budget authority and outlays through 2002.

In their current incarnation, separate caps exist for defense spending, spending on violent crime reduction, and other nondefense (that is, all other discretionary) spending for 1998 and 1999. In 2000, only two sets of caps are in place: one set for violent crime reduction

and one set for the defense and other nondefense categories combined. In 2001 and 2002, there is just one cap for budget authority and one cap for outlays in place for all discretionary spending. Since they were instituted in 1991, the caps—assisted greatly by lower defense spending linked to the end of the Cold War—have restricted growth in discretionary outlays to less than 3 percent in total, a decline of 13 percent in real terms.

Once the caps expire, however, no overarching dollar total established in legislation will control discretionary appropriations. Unlike mandatory spending and revenues, which are governed by permanent laws, discretionary spending is subject to annual appropriations. The concept of current policy for discretionary spending is therefore ambiguous after 2002. Yet a benchmark must be provided for weighing decisions about future appropriations. One such benchmark is the maintenance of real funding—that is, current resource levels adjusted for inflation. The CBO baseline assumes that discretionary spending grows at the rate of inflation once the caps expire in 2002. Under that assumption, CBO projects that the surplus will rise to \$138 billion in 2008.

An alternative is to fix the benchmark at a constant nominal (or dollar) level, which is the course that the Congress and the President have essentially chosen for 1991 through 2002. Under a freeze at the 2002 level of outlays, the surplus by 2008 would be nearly double the baseline projection, reaching a level of \$256 billion. Holding discretionary outlays to their 2002 levels would have a major impact on programs and activities, however, representing a loss in purchasing power of 30 percent between 1998 and the end of the projection period.

Shifts in Payments. The baseline total deficit path (with growth in discretionary spending after 2002) does not grow smoothly over the projection period, partly as a result of calendar quirks and legislated timing shifts. Currently, if the first day of the month falls on a weekend or a federal holiday, payments for veterans' benefits, Supplemental Security Income, and Medicare managed care providers are pushed into the preceding month. When that happens to payments due on October 1—the beginning of the federal government's fiscal year—billions of dollars in outlays can be shifted to the preceding year. In 2000, the timing shifts under prior

law would have totaled \$8 billion; however, the Balanced Budget Act canceled the move from 2001 to 2000 that otherwise would have occurred. Nevertheless, similar shifts in payments will still occur when benefits from 2006 shift into 2005 and benefits from 2007 shift into 2006, producing a pattern of 13, 12, and 11 payments a year. Legislation in 1997 created some new timing adjustments as well: the Balanced Budget Act shifts into 2001 nearly \$5 billion in Medicare payments to health maintenance organizations that otherwise would have been made in 2002, and the Taxpayer

Relief Act delays the receipt of certain excise taxes from 1998 to 1999.

Alternative Measures of the Deficit or Surplus

Although the total deficit is the most common measure of the deficit, analysts often cite two other measures of the amount by which the government's spending exceeds its revenues. One measure—the standardized-

Table 2-1.
The Budget Outlook Under Current Policies (By fiscal year)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Baseline Total Deficit (-) or Surplus ^a	-22	-5	-2	-3	14	69	54	71	75	115	129	138
On-Budget Deficit (Excluding Social Security and Postal Service) ^a	-104	-105	-115	-125	-116	-69	-94	-87	-95	-64	-60	-60
Memorandum:												
Off-Budget Surplus												
Social Security	81	101	113	123	130	139	148	158	170	179	189	197
Postal Service	<u>b</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>b</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	81	100	113	122	130	139	148	158	170	179	189	197
Deficit (-) or Surplus if Discretionary Spending Was Frozen at the 2002 Level from 2003 to 2008	-22	-5	-2	-3	14	69	70	105	128	188	224	256
As a Percentage of GDP												
Baseline Total Deficit (-) or Surplus ^a	-0.3	-0.1	c	c	0.1	0.7	0.5	0.7	0.7	1.0	1.0	1.0
On-Budget Deficit (Excluding Social Security and Postal Service)	-1.3	-1.3	-1.3	-1.4	-1.2	-0.7	-0.9	-0.8	-0.8	-0.5	-0.5	-0.5

SOURCE: Congressional Budget Office.

a. Assumes that discretionary spending grows with inflation after 2002.

b. Less than \$500 million.

c. Less than 0.05 percent.

employment deficit or surplus—removes cyclical economic fluctuations and certain financial factors from the calculation. Another—the on-budget deficit—removes spending and receipts designated by law as off-budget.

Cyclical economic factors can obscure fundamental trends in the budget. For example, an economic slowdown automatically magnifies the size of the deficit, principally because lower revenues are accompanied by higher outlays for unemployment compensation and other benefit programs. Moreover, some government transactions, such as deposit insurance and receipts from Federal Communications Commission auctions of licenses to use the electromagnetic spectrum, merely represent an exchange of assets and have no macroeconomic effects. In calculating the standardized-employment deficit or surplus, those factors are stripped away, and the underlying trends in the deficit or surplus become more apparent. Current projections show a sizable difference between the total deficit and the standardized-employment deficit over the next few years. But that gap is expected to narrow as the difference between actual and potential gross domestic product diminishes. (See Chapter 1 for more information about the standardized-employment deficit or surplus.)

Another measure, the on-budget deficit, is rooted in legislation that granted special, off-budget status to particular programs run by the government. The two Social Security trust funds—Old-Age and Survivors Insurance and Disability Insurance—were granted off-budget status in the Deficit Control Act of 1985. Legislation enacted in 1989 excluded the much smaller net outlays of the Postal Service from on-budget totals.

The fiscal picture looks noticeably different if off-budget programs are excluded (see Table 2-1). In isolation, Social Security runs a surplus; its income from the taxes paid by workers and their employers as well as from interest and a few other sources exceeds its outlays for administrative costs and benefits to retired and disabled workers, their families, and their survivors. A large part of that surplus stems not from the program's excess of taxes over benefits but from interest on its holdings of Treasury securities.

Although CBO's baseline projections show a surplus beginning in 2001, the on-budget measure indi-

cates deficits through 2008, almost entirely as a result of surpluses in Social Security, which are expected to rise from \$101 billion in 1998 to \$197 billion in 2008. The difference between tax receipts and benefits currently accounts for about 55 percent of that surplus; interest receipts make up the other 45 percent. By 2008, however, interest receipts will constitute two-thirds of the surplus. Net Postal Service outlays are projected to be zero in 2003 through 2008 (and small until that period) because the Postal Service is supposed to be self-financing over time and it is impossible to predict the timing of price increases in postage stamps that far into the future. Over time, baseline surpluses that grow more rapidly than the Social Security surplus whittle down the on-budget deficit from \$105 billion in 1998 to \$60 billion in 2008.

Social Security's benefits alone account for more than one-fifth of federal spending, and its payroll taxes account for about one-fourth of government revenues. Therefore, most economists, credit market participants, and policymakers, when they seek to gauge the government's role in the economy and its drain on the credit markets, look at the total budget figures—including Social Security.

Recent Changes in the Budget Outlook

The budget outlook has continued to improve since CBO published its September 1997 projections. The final deficit for 1997 came in at \$22 billion, a mere 0.3 percent of gross domestic product. The deficit was more than \$100 billion lower than CBO had expected last January and \$12 billion less than its estimate in September. In the near future, the same forces that have driven the deficit down dramatically over the past five years—the unexpected surge in revenues, slower growth in federal health care programs, and reduced demand for various entitlements—are expected to remain prominent. In that event, the budget outlook will improve even further—by \$40 billion to \$50 billion in each of the next 10 years compared with the estimates published just four months ago.

Revisions in the Projections Since September 1997

CBO ascribes its revisions of the budget outlook since September to three factors: newly enacted legislation, changes in the economic outlook, and other, technical factors. Most of the economic and technical changes reflect adjustments and trends that have become apparent in the past year or two and that are carried through the longer-term projections.

Recent Legislation. Since September, when the Balanced Budget Act and the Taxpayer Relief Act were passed, the Congress has enacted few laws that have any kind of long-term effect on the budget (see Table 2-2). Consequently, the only evident change is the blip in revenues that occurs in 2001 and 2002, the result of reversing a shift in the timing of payments into the Universal Service Fund. As part of the Balanced Budget Act, the Congress had shifted about \$3 billion in receipts from the end of 2001 to the beginning of 2002. The reversal means that the fund will now collect the revenues in 2001 as originally planned.

Economic Changes. Revisions that can be traced to changes in the macroeconomic forecast reduce the deficit by over \$20 billion in 1998 and by almost \$30 billion in 1999. Around 75 percent of those revisions are on the revenue side and are the product of higher projected levels of economic growth. Also a factor in 1998 are projected short- and long-term interest rates. Those rates are lower than previously estimated, leading to a \$3 billion drop in interest payments.

From 2000 onward, economic changes will have less impact on the budget outlook than they have in 1998 and 1999, resulting in improvements of no more than \$10 billion a year after 2001. Higher interest rates—around a quarter of a percentage point up from the rates assumed in September 1997—boost interest costs by around \$8 billion per year. Revenues are also projected to expand less rapidly because growth in GDP is expected to be slower after 2000 than CBO had previously estimated. Those changes partially offset the savings through 2007 from lower cost-of-living adjustments and unemployment rates as well as accumulated savings in debt service. Projections of discretionary spending after the caps expire in 2002 are also lower than they were in September, now that inflation rates are expected to rise more slowly.

Technical Reestimates. Technical revisions are defined as any changes that are not ascribed to legislation or to modifications in the macroeconomic forecast. Those changes could be economic in nature but not directly tied to CBO's economic forecast—for example, a drop in participation in the Food Stamp program as a result of a growing economy. They could also reflect a myriad of other factors, such as changes in the realizations of capital gains from investing in the stock market or changes in the administrative procedures for a federal assistance program. Technical revisions account for the majority of the post-1999 improvement in CBO's budget outlook.

Technical changes across the 1998-2007 period shrink the deficit or enlarge the surplus by an average of about \$32 billion per year. Revisions in revenues account for about a third of that amount; however, those changes are expected to dwindle in size through 2007, as the effects of temporary factors that caused receipts to surge in 1997 begin to diminish.

On the outlay side, the largest technical changes are in net interest payments. Decreased spending and increased revenues attributable to technical changes translate into lower projections of accumulated debt and therefore smaller debt-service charges. Interest savings on forgone borrowing total \$5 billion in 2000 and \$17 billion in 2007. In addition, changes to the mix of financing and other assumptions about how the Treasury will handle its borrowing activity reduce net interest by another \$3 billion in 2007.

The major federal health care programs, Medicare and Medicaid, were two of the fastest-growing programs in the federal budget in the early 1990s. Over the past two years, though, the growth in both programs has dropped off. After rising at an annual rate of nearly 30 percent just five years ago, the growth in spending for the Medicaid program slowed to 3 percent in 1996 and 4 percent in 1997. Similarly, from double-digit rates a few years ago, the annual increase in Medicare spending dropped to about 8 percent in 1996 and 9 percent in 1997. Because the expenditures in both programs have continued to be lower than expected, CBO has reduced its estimates of spending over the projection period, particularly for Medicaid. Yet even with those lower rates of growth, spending in both programs is projected to climb by more than 7 percent annually over the next decade. (For more explanation of the fac-

Table 2-2.
Changes in CBO Baseline Deficits Since September 1997 (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
September Baseline Deficit (-) or Surplus ^a	-34	-57	-52	-48	-36	32	13	29	36	72	86
Policy Changes											
Revenues	0	b	b	b	3	-3	b	b	b	b	b
Outlays	<u>0</u>	<u>-1</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>
Total Policy Changes ^c	0	1	b	b	3	-3	b	b	b	b	b
Economic Changes											
Revenues	0	16	21	14	9	b	-4	-8	-15	-18	-27
Outlays											
Net interest											
Interest rate effects	b	-3	b	7	8	8	8	9	9	8	8
Debt service	b	-1	-2	-3	-4	-5	-5	-6	-6	-6	-6
COLA programs ^d	0	b	-2	-5	-7	-8	-10	-12	-14	-16	-18
Unemployment insurance	0	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2
Discretionary spending	0	0	0	0	0	0	-2	-3	-5	-7	-9
Other	<u>0</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>
Subtotal	b	-6	-7	-5	-7	-9	-12	-15	-19	-24	-29
Total Economic Changes ^c	b	22	28	18	15	9	8	8	4	6	1
Technical Changes											
Revenues	1	14	10	14	14	13	12	11	10	8	6
Outlays											
Net interest											
Debt service	b	-1	-3	-5	-6	-8	-9	-11	-13	-15	-17
Other	-1	-1	1	1	1	b	b	-1	-1	-2	-3
Medicaid	b	-3	-2	-4	-4	-6	-7	-8	-8	-9	-10
Medicare	-1	-3	-2	-1	b	b	-1	-2	-3	-7	-12
Social Security	b	-3	-4	-4	-5	-6	-6	-6	-5	-2	-1
Food Stamps	b	-2	-2	-2	-3	-2	-2	-2	-2	-2	-2
Family support	b	-3	-4	-3	-2	b	b	1	1	1	1
Student loans	b	1	1	1	1	1	2	2	2	2	2
Veterans compensation (smoking)	0	b	1	1	2	3	4	5	7	7	8
Discretionary spending	-2	2	b	-1	-1	-1	-1	-1	-1	-1	-1
Other	<u>-8</u>	<u>-2</u>	<u>3</u>	<u>4</u>	<u>b</u>	<u>b</u>	<u>-1</u>	<u>b</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>
Subtotal	-11	-15	-12	-13	-17	-18	-21	-23	-25	-30	-35
Total Technical Changes ^c	12	29	22	26	32	32	33	34	35	37	42
Total Changes	12	51	50	45	50	38	41	42	40	43	44
Current Baseline Deficit (-) or Surplus ^a	-22	-5	-2	-3	14	69	54	71	75	115	129

SOURCE: Congressional Budget Office.

NOTE: Revenue gains are shown with a positive sign because they increase the surplus or decrease the deficit.

- The baseline assumes that discretionary spending will equal the statutory caps on discretionary spending in 1998 through 2002 and will grow at the rate of inflation in succeeding years.
- Less than \$500 million.
- Includes changes in both revenues and outlays. The figure shown is the effect on the deficit or surplus. Increases in the surplus are shown as positive.
- Programs that have cost-of-living adjustments (COLAs) include Social Security, Civil Service Retirement, Railroad Retirement, Military Retirement, veterans' compensation and pensions, and Supplemental Security Income.

tors that have reduced the growth in Medicare and Medicaid, see Appendixes F and G.)

Decreases in the projected number of people eligible for Social Security shrink outlays in that category by \$3 billion to \$6 billion per year through 2005. Along similar lines, CBO has cut its estimate of Food Stamp outlays by about \$2 billion per year because of lower projected levels of participation.

For the most part, the technical changes in Temporary Assistance for Needy Families and related family support programs reflect the timing of outlays. States have not been drawing down available funds as quickly as CBO initially expected. After 2000, state programs will be operating closer to capacity and spending money more rapidly. By 2004, outlays for family support are projected to be \$1 billion higher than had previously been anticipated.

Bucking the trend of lower anticipated outlays for entitlements, two programs are expected to record significantly higher spending in the future. As a result of improved estimates of the subsidy cost of student loans, CBO projects that such costs will be as much as \$2 billion higher per year through 2007. Box 2-1 provides more details about how the costs of student loans are treated under credit reform principles.

The second entitlement program that is expected to have much higher costs in the future is veterans' compensation. The Undersecretary for Health of the Department of Veterans Affairs has recently concluded that nicotine dependence may be considered a service-related disease for the purposes of compensation. As eligible veterans or their spouses begin to take advantage of that ruling, the costs will pile up. Because very few cases have been referred to adjudication thus far, estimates of future costs are extremely tenuous; however, CBO projects that costs could reach nearly \$8 billion annually by 2007.

Two recent updates that affect estimates for 1998 are worth noting. The Office of Management and Budget (OMB) is expected to announce a \$3 billion upward revision in subsidy costs related to the auction of licenses to use the electromagnetic spectrum. CBO has incorporated that revision in its baseline. (Previously, both CBO and OMB underestimated the number of winning bidders that are likely to default on payments

for C-block licenses, thereby overestimating the expected receipts from the auction.) Offsetting the change in subsidy costs is a \$3 billion downward revision in spending on the children's health insurance program. CBO expects states to tap only a portion of their \$4 billion block grant for the program in 1998 but then to quickly expand their outlays in future years.

Differences from the January 1997 Baseline

The change in the budget outlook over the past year has been dramatic. Last January, CBO projected a deficit of \$124 billion for 1997. But after withheld individual income tax payments were stronger than expected for several months and a burst of nonwithheld tax revenues flowed into the Treasury in April, it was obvious that the January estimate was too high. Therefore, in May, CBO acknowledged that the surge in revenues could reduce the deficit by \$45 billion, and that calculation was used to underpin the budget resolution passed in June. By the beginning of September, CBO had further dropped its estimate of the 1997 deficit to \$34 billion. Two months later, the Treasury reported that the actual deficit totaled \$22 billion. What caused such a free fall—and will those factors continue to affect the budget?

When evaluated on its own, a \$100 billion difference between CBO's January estimate and the actual figure seems quite steep. However, the federal budget has become so large that small percentage errors in estimating outlays or revenues can cause a large error in projecting deficits or surpluses. In fact, when viewed in percentage terms, the magnitude of the estimating error in 1997 is comparable with the magnitudes in several previous years. (Box 2-2 presents an evaluation with that in previous estimating errors; Appendix B analyzes the sources of differences between budget resolutions going back to 1980 and levels of actual spending, revenues, and deficits.)

The substantial improvement in the budget outlook in 1997 reflects a set of trends that CBO believes will carry through the projection period: namely, higher revenues and slower growth in outlays practically across the board. That favorable outcome results almost entirely from changes in the economic outlook and from technical factors. In fact, the effects of recent leg-

islative changes on projections for the next two years have actually worked in the opposite direction by increasing discretionary spending in 1998 and initiating tax cuts (see Table 2-3).

Overall, CBO expects that the deficit in both the current year (1998) and the budget year (1999) will be over \$100 billion lower than was anticipated last January. About half of that reduction can be ascribed to favorable economic trends; the other half is primarily a result of technical revisions.

Changes in Revenues. A review of 1997 indicates that about 70 percent of the \$102 billion difference be-

tween the actual deficit and the January 1997 projection is attributable to higher-than-expected tax revenues. One factor is the unexpectedly strong growth of the economy, which advanced 5.8 percent (in nominal terms) rather than the 4.6 percent that CBO had projected. However, the economy is not the entire story—the unexpected growth of income reported in the national income and product accounts (NIPAs) explains only \$23 billion of the revenue surprise in 1997.

Other factors are apparently at work as well. Realizations of capital gains account for most of the unexpected flood of tax receipts in April (those realizations are not included in the NIPAs). Some observers also

Box 2-1.

Pricing Interest Rate Caps on Student Loans

The budgetary effects of student loans are computed as subsidies under the principles of credit reform, which were designed to correct an imbalance in measuring the costs of federal loan programs relative to grant programs. Those principles require the Office of Management and Budget (OMB) and the Congressional Budget Office to take into account all aspects of credit programs that could eventually affect cash flows to the government and estimate the present value of those costs. The present value is the amount of funds that would have to be set aside today, together with interest, to cover all current and future net costs for a particular set of loans. In the case of student loans, the future costs generally reflect the total subsidization of interest on certain loans while the student is in school or nonrepayment of a loan because of bankruptcy, disability, or death.

Less obvious in a period of relatively low interest rates are the potential costs associated with the caps on interest rates that can be charged on student loans. Under current law, the maximum interest rate that lenders can charge students is determined by a formula: during repayment, loans issued before July 1998 carry a maximum interest rate of the 91-day Treasury bill rate plus 3.1 percentage points, and loans awarded after June 1998 will use an interest rate based on the 10-year Treasury note rate plus 1.0 percentage point—but the interest rate in either case cannot exceed 8.25 percent. With guaranteed loans, interest rates above 8.25 percent trigger special-allowance payments to the lender based on the rate determined by the formula and the 8.25 percent

cap. In the direct loan program, the federal government absorbs the difference in the form of forgone receipts. The cap exists to limit the costs to borrowers in times of high interest rates, and the special allowance ensures that lenders will still be willing to supply the funds.

Until now, CBO and OMB have assigned little, if any, cost to the interest rate caps—and therefore the special allowances—because their forecasts of interest rates tended to result in levels that were below the 8.25 percent rate. For example, under CBO's baseline forecast, student loan rates after June 1998 are not anticipated to exceed 8.1 percent. However, fluctuations in interest rates occur with sufficient frequency and magnitude that the 8.25 percent interest rate ceiling could conceivably be reached. An accurate assessment of the subsidy costs of the program should reflect the possibility that interest rates will become high enough to invoke the cap. Consequently, CBO has begun to estimate the subsidy costs of the interest rate ceiling.

Relative to its baseline interest rates, CBO estimates that in any given year, there is nearly a 30 percent chance that interest rates on 10-year Treasury notes will cause the interest rate on student loans to be constrained by the cap and that the average special-allowance payment in those years would be an additional 150 basis points. The present value of those payments (or lost receipts) adds roughly \$1 billion to the annual subsidy costs of student loans over the next decade.

believe that higher-income taxpayers have been experiencing above-average growth in income that in turn boosts revenues (because the income of those taxpayers is taxed at higher marginal rates). Those and possibly other technical factors bolstered 1997 revenues by \$46 billion compared with the January estimate. (Chapter 3 offers an in-depth look at CBO's revenue projections.)

Table 2-3.
Changes in CBO Projections Since January 1997 (By fiscal year, in billions of dollars)

	1997	1998	1999
January 1997 Baseline			
Revenues	1,507	1,567	1,634
Outlays	1,632	1,687	1,781
Deficit	-124	-120	-147
Changes in Projections			
Legislative			
Revenues	3	-9	-7
Outlays	<u>-1</u>	<u>11</u>	<u>-10</u>
Subtotal	2	-20	3
Economic			
Revenues	23	57	66
Outlays	<u>a</u>	<u>-7</u>	<u>-15</u>
Subtotal	23	64	80
Technical			
Revenues	46	50	36
Outlays	<u>-31</u>	<u>-20</u>	<u>-26</u>
Subtotal	77	70	62
All Changes			
Revenues	72	98	95
Outlays	<u>-30</u>	<u>-16</u>	<u>-50</u>
Total	102	114	145
January 1998 Baseline			
Revenues	1,579	1,665	1,729
Outlays	1,601	1,670	1,731
Deficit	-22	-5	-2

SOURCE: Congressional Budget Office.

a. Less than \$500 million.

In light of those 1997 developments, CBO has increased its estimate of revenues in 1998 and 1999 by nearly \$100 billion in each year compared with last January's forecast. CBO's estimates of the rise in nominal GDP for fiscal year 1998 are noticeably higher in the current forecast than in the forecast of a year ago (5.0 percent versus 4.5 percent). The current estimate of growth for 1999 is slightly lower than it was a year ago, but the base is so much higher that the favorable effect on revenues lingers. The updated economic forecast pushes up estimated revenues by \$57 billion in 1998 and \$66 billion in 1999.

The technical factors that boosted revenues in 1997 are expected to continue into 1998 and 1999. Those factors lift revenues by another \$50 billion in 1998 before tailing off to about \$36 billion in 1999. Over time, CBO assumes that the magnitude of those technical adjustments will lessen as temporary factors fade in importance.

Legislative changes for 1997 through 1999 pale in comparison with (and in 1998 and 1999 work in the opposite direction of) the technical and economic adjustments made to the revenue forecast. The reinstatement of airline ticket taxes expanded revenues by nearly \$3 billion in 1997. However, that relatively small increase is offset in 1998 and 1999 by the new tax incentives and credits, as well as provisions that change payment dates, included in the Taxpayer Relief Act. (For more detail, see *The Economic and Budget Outlook: An Update* of September 1997.) All told, recent legislation has reduced revenue projections by \$9 billion this year and \$7 billion next year. By 2007, though, losses in future revenues that can be attributed to legislation grow to \$35 billion.

Changes in Outlays. In 1997, changes to CBO's projections of outlays were dominated by technical changes. Outlays turned out to be over \$30 billion lower than originally projected in January for reasons that range from declining caseloads in federal benefit programs to differences in the timing of payments.

Nearly all of the major entitlement programs spent less money in 1997 than CBO had estimated they would at the beginning of the year. Lower-than-expected caseloads and other factors drove down outlays

Box 2-2. CBO's Estimating Track Record

Fiscal year 1997 was a good year for the budget but a bad year for budget estimators. As the deficit plunged to \$22 billion, budgeteers were left wondering how to explain projections made less than a year before that were wrong by \$100 billion. Such a difference may seem quite large at first glance; however, as a percentage of the entire budget, it looks much smaller, and estimating errors of that kind are not unprecedented.

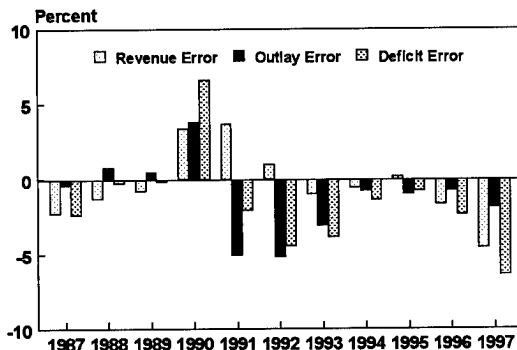
In January 1997, the Congressional Budget Office projected a deficit of \$124 billion for the year. As it turned out, revenues were \$72 billion higher and outlays \$30 billion lower than expected. In percentage terms, actual revenues were 4.6 percent higher than projected, whereas outlays turned out to be nearly 2 percent lower. The figure below shows how the actual figures for revenues, outlays, and the deficit

compare with CBO's January projections over the past 10 years.

The difference last year between projected and actual revenues was the largest of the 1987-1997 period. In some years, actual revenues were higher than projected and in some years lower. The understatement of revenues in 1997 contrasts with the experiences in 1990 and 1991, when revenues were about 3.5 percent lower than CBO had estimated.

At nearly 2 percent, the discrepancy between projected and actual outlays in 1997 was slightly lower than the absolute average since 1987. If estimators are lucky, the error they make in projecting outlays will work in the opposite direction from the revenue error. Unfortunately, that did not happen in 1997—overall, as a percentage of outlays, the error made in projecting the deficit was 6.4 percent. Yet that percentage was not the highest ever recorded. In 1990, at the height of the banking and thrift industry crisis, CBO *underestimated* the deficit by \$83 billion—or 6.6 percent of total outlays.

Comparing CBO's January Estimates
with Actual Revenues, Outlays, and Deficits



SOURCE: Congressional Budget Office.

NOTES: Estimated and actual revenues, outlays, and deficits are for the fiscal year that began on October 1 preceding the January estimates. The deficit error is compared with actual outlays.

The individual bars point in the direction of their deficit effect. For example, if actual revenues were greater than projected, the deficit would have been smaller. Therefore, the percentage change would be negative.

CBO's track record is similar to the record of both the Office of Management and Budget (OMB) and private forecasters. Since 1987, the average absolute percentage difference between OMB's estimate of revenues when the President's budget is released (usually around February) and the year-end total has been 1.8 percent, which is almost equal to CBO's discrepancy of 1.9 percent. On the outlay side, OMB's estimates have averaged within 2.7 percent of the actual amount, whereas CBO has averaged 2.1 percent. As far as 1997 is concerned, almost all private forecasts in January placed the deficit for the year at well over \$100 billion.

All of that volatility merely proves that budget estimating is not an exact science. And with the federal budget growing each year in size and complexity, the potential for sudden swings, such as those witnessed last year, will be magnified in the future.

for programs such as Medicaid (-\$4 billion), family support (-\$3 billion), Social Security (-\$2 billion), unemployment insurance (-\$2 billion), Food Stamps (-\$2 billion), Supplemental Security Income (-\$1 billion), and Medicare (-\$1 billion). Higher-than-expected receipts from spectrum auctions and deposit insurance programs also shrank the deficit in 1997 by \$10 billion.

On the economic front, inflation and unemployment were both lower than anticipated in 1997, and CBO's projections for 1998 and 1999 reflect those trends. The consumer price index for all urban consumers (CPI-U) is currently expected to inch up by just 2.1 percent in 1998 as opposed to the prediction of 2.9 percent last January. For 1999, the CPI-U projection is half a percentage point lower than before. A lower level of inflation translates into smaller cost-of-living adjustments (COLAs) for programs such as Social Security, federal retirement, and Supplemental Security Income. Reductions in COLA assumptions decrease projected outlays by \$2.5 billion in 1998 and \$5.5 billion in 1999 and continue to cumulate over time.

Unemployment rates averaged 5.1 percent in 1997, and CBO projects that they will decline to 4.7 percent in 1998 before rising to 5.0 percent in 1999. The projections for 1998 and 1999 are each 0.8 percentage points below the corresponding estimates of one year ago. Such a large drop in the outlook for unemployment has led to a reduction in projected outlays for unemployment insurance of \$3 billion in both 1998 and 1999.

Debt-service effects account for most of the rest of the economic differences from the January 1997 baseline. In sum, the improved economic outlook reduces projected outlays only slightly—by \$7 billion in 1998 and \$15 billion in 1999.

Legislative changes in outlays are almost entirely attributable to the reconciliation acts passed in August 1997. The Balanced Budget Act increased outlays by \$11 billion in 1998, mostly on the discretionary side of the budget. In 1999, when the discretionary caps are tighter and mandatory changes are phased in more fully, CBO projects that outlays will drop by \$10 billion as a result of the legislation. In 2002, when changes in Medicare and other programs have been phased in, the reconciliation acts will reduce outlays by \$109 billion. (CBO's September 1997 update of *The Economic and*

Budget Outlook discusses the provisions of the Balanced Budget and Taxpayer Relief Acts.)

Debt and the Deficit

Many people confuse the terms "debt" and "deficit," even though one is vastly larger than the other. The deficit (as measured on a total-budget basis) represents the difference between the government's expenditures and the revenues that it receives. It is a flow measure; that is, the deficit measures that difference over a defined period—usually one year. Last year's deficit was \$22 billion.

The debt, in contrast, is a stock measure. Debt held by the public is the amount of money that the federal government has borrowed to finance all of the deficits accumulated over the history of the country (less any surpluses) as well as other, considerably smaller financing needs. At the end of 1997, debt held by the public totaled nearly \$3.8 trillion.

In addition to debt held by the public, two other measures of indebtedness are often cited. Gross federal debt counts debt issued to government accounts as well as debt held by the public. Debt subject to limit represents the ceiling set by the Congress, up to which the Treasury is authorized to borrow from all sources.

Debt Held by the Public

To cover the difference between revenues and expenditures, the Department of the Treasury raises money by selling securities to the public. Since 1969, the Treasury has sold ever-increasing amounts of those securities to finance continuing deficits, thereby causing debt held by the public to climb from year to year. CBO's current baseline forecast points to a different scenario. If the surpluses projected in the baseline materialize, debt held by the public will actually decline from today's level of \$3.8 trillion to \$3.3 trillion at the end of 2008 (see Table 2-4).

In most years, borrowing by the Treasury closely parallels the total deficit. However, a number of factors broadly labeled "other means of financing" also affect

the government's need to borrow money from the public. Those factors include reductions (or increases) in the government's cash balances, seigniorage, and other, miscellaneous changes. The largest of the other borrowing needs reflects the capitalization of financing accounts used for credit programs. Direct student loans, housing programs for veterans, loans by the Small Business Administration, and other credit programs require disbursements up front by the govern-

ment with the promise of repayment at a later date. Those up-front outlays are not counted toward the deficit, which reflects only the estimated subsidy costs of such programs. Because the amount of the loans being disbursed is larger than the repayments and interest flowing back in during the projection period, the government's projected borrowing needs increase between 1998 and 2008 by between \$10 billion and \$14 billion a year.

Table 2-4.
CBO Projections of Federal Debt (By fiscal year)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Debt Held by the Public at the Beginning of the Year	3,733	3,771	3,790	3,806	3,821	3,821	3,765	3,725	3,668	3,606	3,503	3,386
Changes												
Deficit or surplus (-) ^a	22	5	2	3	-14	-69	-54	-71	-75	-115	-129	-138
Credit financing accounts	21	14	13	11	13	13	13	12	12	11	11	10
Other	-4	-1	1	1	1	1	1	1	1	1	1	1
Subtotal	38	19	16	15	b	-55	-40	-58	-62	-102	-117	-126
Debt Held by the Public at the End of the Year	3,771	3,790	3,806	3,821	3,821	3,765	3,725	3,668	3,606	3,503	3,386	3,259
Debt Held by Government Accounts												
Social Security	631	732	845	968	1,098	1,236	1,384	1,542	1,712	1,891	2,080	2,278
Other government accounts	968	1,018	1,089	1,156	1,220	1,289	1,358	1,424	1,489	1,549	1,610	1,662
Subtotal	1,599	1,750	1,933	2,123	2,318	2,525	2,742	2,965	3,201	3,440	3,690	3,940
Gross Federal Debt	5,370	5,540	5,740	5,945	6,139	6,291	6,468	6,633	6,806	6,943	7,076	7,199
Debt Subject to Limit ^c	5,328	5,499	5,700	5,905	6,101	6,255	6,433	6,601	6,776	6,914	7,048	7,173
As a Percentage of GDP												
Debt Held by the Public at the End of the Year	47.3	45.3	43.6	42.0	40.2	37.9	35.8	33.6	31.5	29.3	27.0	24.8

SOURCE: Congressional Budget Office.

NOTE: Projections of interest and debt assume that discretionary spending adheres to the statutory caps that are in effect through 2002 and grows at the rate of inflation thereafter.

a. Deficits are shown as positive because they increase the debt.

b. Less than \$500 million.

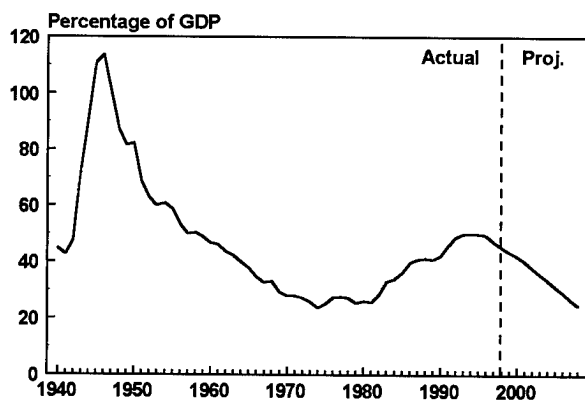
c. Differs from the gross federal debt primarily because most debt issued by agencies other than the Treasury is excluded from the debt limit.

As a percentage of GDP, debt held by the public reached a plateau from 1993 through 1995 of about 50 percent (see Figure 2-1). Since then, debt held by the public has fallen to 47 percent of GDP. By 2008, that proportion is expected to drop by half to a ratio not seen since the 1970s. The shrinking debt would generate considerable savings in interest over time. In fact, net interest is projected to be \$194 billion in 2008—\$50 billion lower than its level in 1997.

How Do We Pay Down the Debt?

As a matter of course, the Treasury issues and redeems securities every week. When the government ran large deficits, the Treasury would normally sell enough securities at each auction to roll over any maturing debt plus a little extra to raise new cash. By those means, the debt has essentially grown by increments—auction by auction and week by week. The Treasury can use the same means to *reduce* the size of the outstanding debt. Depending on cash needs at any given time, the Treasury could issue a little bit *less* than necessary to refinance maturing debt fully. Using the projected surpluses to pay down the debt in this manner would reduce debt held by the public by over \$550 billion between 2001 and 2008.

Figure 2-1.
Debt Held by the Public as a Share of GDP
(By fiscal year)



SOURCE: Congressional Budget Office.

By contrast, if the budget remained in exact balance instead of running surpluses between 2001 and 2008, debt held by the public would stabilize at about its current level of \$3.8 trillion. The effects of that change on the budget would compound over time. By 2008, using the projected surpluses to increase spending or cut taxes rather than pay down debt would increase interest payments by \$32 billion. Reducing debt in the near term can substantially decrease interest payments in the future when expenditures on programs such as Social Security and Medicare are expected to soar in response to the retirement of the baby boomers.

Gross Federal Debt

The Treasury has also issued \$1.6 trillion in securities to various government accounts, mostly trust funds. The largest balances are in Social Security (\$631 billion at the end of 1997) and federal civilian employee retirement (\$431 billion). Total government account holdings grow approximately in step with projected trust fund surpluses. The funds redeem securities when they need to pay benefits; in the meantime, the government both pays and collects interest on those securities.

Investments by trust funds and other government accounts are handled within the Treasury, and the purchases and sales, with very rare exceptions, do not flow through the credit markets. Similarly, interest on those securities is simply an intragovernmental transfer: it is paid by one part of the government to another part and does not affect the deficit or surplus. Thus, financial market participants—if they think about trust fund holdings at all—view them as a bookkeeping entry, an intragovernmental IOU. The holdings are, however, an indicator of federal commitments for future spending.

Debt Subject to Limit

The Congress sets a limit on the Treasury's authority to issue debt. That ceiling applies to securities issued to federal trust funds as well as those sold to the public. Debt subject to limit is practically identical to the gross federal debt and is widely cited as the measure of the government's indebtedness. (The minor differences between gross debt and debt subject to limit arise

chiefly because securities issued by agencies other than the Treasury, such as the Tennessee Valley Authority, are exempt from the debt limit.)

Since trust funds and other government accounts as a whole will continue to swell even as surpluses are projected to develop in the unified budget, debt subject to limit will continue to grow over the next decade from its 1997 year-end level of \$5.3 trillion. As part of the Balanced Budget Act, the Congress raised the debt ceiling to \$5.95 trillion. That level should be adequate until sometime during fiscal year 2001.

Federal Funds and Trust Funds

The budget comprises two groups of funds: trust funds and federal funds. Trust funds are simply those programs that are so labeled in legislation; federal funds include all other transactions with the public. About 60 percent of federal spending is derived from federal funds.

There are more than 150 federal government trust funds, although fewer than a dozen account for the vast share of trust fund dollars. Among the largest are the two Social Security trust funds along with those dedicated to Civil Service Retirement, Hospital Insurance (also known as Medicare Part A), and Military Retirement. Trust funds have no particular economic significance; they function primarily as accounting mechanisms to track receipts and spending for programs that have specific taxes or other revenues earmarked for their use.

When a trust fund receives payroll taxes or other income that is not currently needed to pay benefits, the excess is loaned to the Treasury. If the rest of the budget is in deficit, the Treasury borrows less from the public than would otherwise be required to finance current operations. If the rest of the budget is in balance or in surplus, the Treasury uses the cash to retire outstanding debt.

The process is reversed when the time comes for a trust fund to draw down its reserves to pay benefits. The Treasury must repay (with interest) what it has

borrowed from the trust fund and must raise the cash somewhere else. The government must either boost taxes, reduce other spending, borrow more from the public, or (if the total budget is in surplus) retire less debt.

In assessing the effect of federal activities on the Treasury's cash borrowing needs, it is essential to include the cash receipts and expenditures of the trust funds in the budget totals along with other federal programs. The Congressional Budget Office, the Office of Management and Budget, and other fiscal analysts therefore focus on a comprehensive measure of the federal budget, including the trust funds.

In 1998, the total deficit is estimated to be \$5 billion, which can be divided into a federal funds deficit of \$155 billion and a trust fund surplus of \$150 billion (see Table 2-5). The line between federal funds and trust funds is not neat, however, because trust funds receive much of their income from transfers within the budget. Such transfers shift money from the general fund (thereby boosting the federal funds deficit) to trust funds (thus swelling the trust fund surplus). Those intragovernmental transfers will total almost \$260 billion in 1998. Prominent among them are interest paid to trust funds (\$119 billion in 1998), government contributions to retirement funds on behalf of present and past federal employees (\$73 billion), and contributions by the general fund to Medicare, principally Part B (\$75 billion). Clearly, each of those transfers was instituted for a purpose—for example, to force agencies to weigh the costs of cash retirement benefits in their hiring decisions. But it is equally clear that transferring money from one part of the government to another does not change the total deficit or the government's borrowing needs. Without intragovernmental transfers, the trust funds would have an overall deficit every year, ranging from about \$110 billion in 1998 to over \$265 billion in 2008.

All major trust funds except the Hospital Insurance (Part A) fund are now generating surpluses and are projected to continue generating them through 2008 under current policies. Although the slow depletion of the Part A fund continues, its projected insolvency has been staved off until 2010, thanks to a reassignment of the costs of certain home health services to the Supplementary Medical Insurance Trust Fund (Medicare Part B), spending cuts specified in the Balanced Budget Act,

and higher expected revenues. The shift in accounting for home health costs has no effect on Medicare benefit payments; however, it increases the Part B premium. Medicare Part B runs a small surplus every year by design, getting roughly one-fourth of its income from enrollee premiums and tapping the general fund of the government for the rest of its \$75 billion-plus outlays.

The two Social Security trust funds are currently running a combined surplus of about \$100 billion a

year. By 2008, the annual Social Security surplus will approach \$200 billion. Those surpluses will start to shrink rapidly, however, when the baby boomers begin to retire. According to the intermediate estimates of the Social Security actuaries, starting in 2012, payroll tax revenues will be insufficient to cover outgo from the funds. Total income (including interest) is expected to fall short of outgo beginning in 2019, and the funds are due to be exhausted in 2029.

Table 2-5.
Trust Fund Surpluses (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Social Security	81	101	113	123	130	139	148	158	170	179	189	197
Medicare												
Hospital Insurance (Part A)	-9	-4	-2	a	-3	2	-2	-5	-13	-9	-19	-26
Supplementary Medical Insurance (Part B)	<u>8</u>	<u>a</u>	<u>4</u>	<u>4</u>	<u>6</u>	<u>3</u>	<u>7</u>	<u>6</u>	<u>8</u>	<u>3</u>	<u>9</u>	<u>8</u>
Subtotal	-1	-5	1	4	3	5	5	1	-5	-7	-10	-18
Military Retirement	8	7	7	7	8	8	8	9	9	10	10	11
Civilian Retirement ^b	29	29	30	31	31	32	31	30	30	29	29	28
Unemployment	8	10	9	7	6	5	5	5	5	5	6	4
Highway	1	1	12	7	7	7	8	9	9	10	10	11
Airport and Airways	-1	3	5	4	5	6	7	8	9	10	11	12
Other ^c	<u>-1</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Total Trust Fund Surplus ^d	124	150	181	187	193	205	215	223	231	240	249	249
Federal Funds Deficit ^d	-146	-155	-183	-190	-179	-136	-161	-152	-156	-125	-119	-111
Total Deficit	-22	-5	-2	-3	14	69	54	71	75	115	129	138
Memorandum:												
Net Transfers from Federal Funds to Trust Funds	253	258	278	298	323	339	370	395	429	442	485	516

SOURCE: Congressional Budget Office.

a. Less than \$500 million.

b. Civil Service Retirement, Foreign Service Retirement, and several smaller funds.

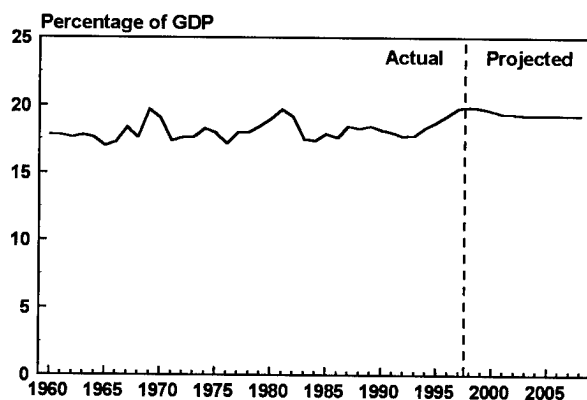
c. Primarily Railroad Retirement, federal employees' health and life insurance, Hazardous Substance Superfund, and various veterans' insurance trust funds.

d. Assumes that reductions in discretionary spending to comply with the caps are made in non-trust-fund programs.

The Revenue Outlook

In fiscal year 1998, federal revenues are projected to reach almost \$1.7 trillion under current tax laws. That amount would equal 19.9 percent of the country's gross domestic product, slightly above the 19.8 percent level seen last year. Revenues have attained that high a share of GDP only twice before since World War II—in 1969 and 1981—both times under unusual circumstances (see Figure 3-1). In 1969, revenues were boosted by a temporary surcharge on income taxes to help finance the Vietnam War. In 1981, revenues were pushed up because several years of high inflation had moved many people into higher income tax brackets. (Until the mid-1980s, the rate brackets of the individual income tax were narrower and were not indexed for inflation.)

Figure 3-1.
Federal Revenues as a Share of GDP
(By fiscal year)



SOURCE: Congressional Budget Office.

This time, the high level of revenues as a share of GDP results from both high taxable incomes and high effective tax rates on those incomes. In 1997, the remarkably strong economy pushed total taxable income (as measured by the government's national income and product accounts, or NIPAs) to its largest share of GDP in 28 years. In addition, a soaring stock market has expanded the tax base through increased capital gains realizations (which are not included in the NIPAs). The economic expansion has also pushed more income into tax brackets with higher rates, further increasing revenues relative to GDP.

The economy continues to perform better than previously expected. In addition, revenue collections continue to be robust. Based on those developments, the Congressional Budget Office has raised its projection of revenues for 1998 and 1999 by about \$30 billion a year from the projection in its September report (see Table 2-2 in Chapter 2). The main reason for the revision is higher projections of individual and corporate income as measured by the NIPAs. However, part of the revision (approximately \$10 billion in both 1998 and 1999) reflects the expectation that some of the factors that boosted income tax receipts in 1997 will persist longer than previously assumed.

Revenues appear likely to continue increasing slightly faster than GDP in 1998. That would make this year the fifth in a row in which revenue growth has exceeded economic growth. Next year, however, that situation is expected to reverse, with revenues growing more slowly than GDP in 1999 through 2003 (see Table 3-1 and Figure 3-2).

Tax cuts enacted in 1997 are only part of the reason for next year's slower revenue growth. The cuts in the Taxpayer Relief Act are expected to reduce revenues slightly in 1998 and 1999 and by a modest 0.3 percent of GDP in 2000. The other reason that revenues are projected to grow more slowly than the economy starting in 1999 is that both corporate income and capital gains realizations are estimated to grow by less than GDP.

Barring changes in tax laws, CBO expects total revenues to keep pace with economic growth after 2003, remaining at 19.3 percent of GDP through 2008. During that period, individual income tax receipts are

expected to continue growing faster than GDP. Even though the rate brackets in the individual income tax are indexed for inflation, the projected rise in personal income will outstrip inflation and thus boost the effective tax rate. However, that faster growth in individual income tax receipts will be offset by slower growth in corporate income tax receipts (as increases in corporate income continue to lag behind increases in GDP) and by slower growth in excise tax receipts.

Because CBO's current revenue projections reflect the unusual developments of the past year, it helps to begin with what was learned in 1997.

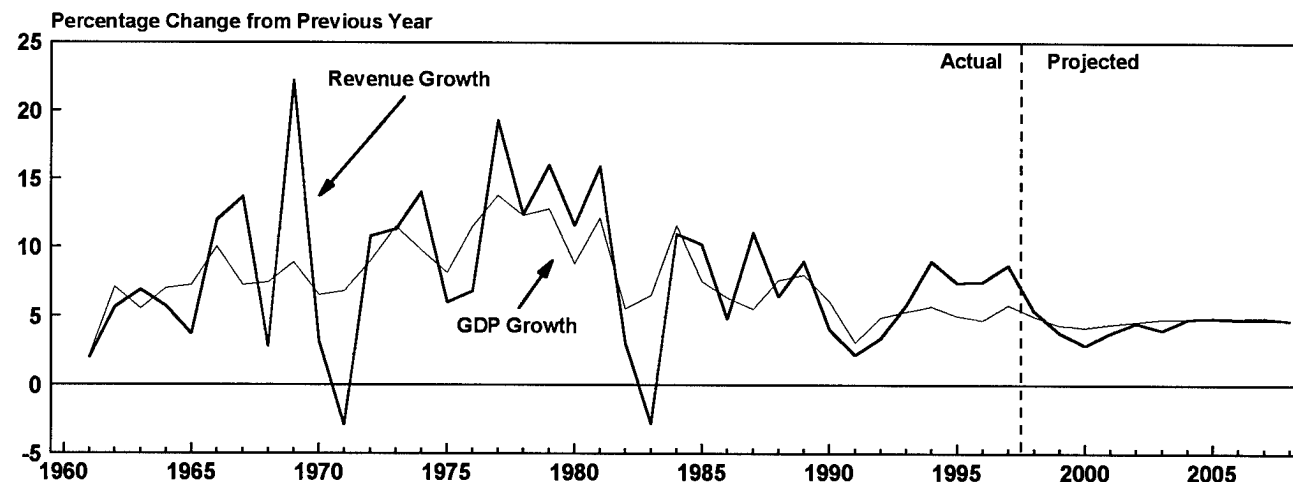
Table 3-1.
CBO Revenue Projections (By fiscal year)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Individual Income Taxes	737	768	782	805	840	886	922	974	1,027	1,083	1,143	1,207
Corporate Income Taxes	182	197	200	200	200	203	209	216	224	232	241	250
Social Insurance Taxes	539	573	600	625	651	679	710	743	781	817	856	892
Excise Taxes	57	55	69	65	66	69	70	71	73	74	76	77
Estate and Gift Taxes	20	22	23	24	25	26	28	29	29	30	31	33
Customs Duties	18	19	19	20	21	22	23	24	25	27	28	29
Miscellaneous	25	32	35	40	43	44	46	47	49	51	52	52
Total	1,579	1,665	1,729	1,779	1,847	1,930	2,008	2,105	2,208	2,314	2,426	2,540
On-budget	1,187	1,247	1,290	1,321	1,370	1,432	1,487	1,559	1,634	1,713	1,796	1,882
Off-budget ^a	392	417	438	458	477	498	521	546	574	601	630	658
As a Percentage of GDP												
Individual Income Taxes	9.3	9.2	9.0	8.8	8.8	8.9	8.9	8.9	9.0	9.0	9.1	9.2
Corporate Income Taxes	2.3	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9
Social Insurance Taxes	6.8	6.8	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Excise Taxes	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Estate and Gift Taxes	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3
Customs Duties	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Miscellaneous	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total	19.8	19.9	19.8	19.6	19.4	19.4	19.3	19.3	19.3	19.3	19.3	19.3
On-budget	14.9	14.9	14.8	14.5	14.4	14.4	14.3	14.3	14.3	14.3	14.3	14.3
Off-budget ^a	4.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

SOURCE: Congressional Budget Office.

a. Social Security.

Figure 3-2.
Annual Growth of Federal Revenues and GDP (By fiscal year)



SOURCE: Congressional Budget Office.

Why Were Revenues Higher Than Expected in 1997?

Tax receipts in fiscal year 1997 turned out to be \$72 billion higher than the \$1,507 billion that CBO estimated last January (see Table 3-2). The strength of those revenues—which took most observers by surprise—is explained mainly by unexpectedly strong growth in individual income tax receipts. Those receipts had been projected to rise by 3 percent, a somewhat lower rate than the growth in taxable personal income (that is, wages and salaries plus income from nonwage sources other than capital gains). Instead, those receipts rose by more than 12 percent, in part because personal income grew more rapidly than expected, but mainly because of unusually high realizations of capital gains and because a growing share of income was earned by people at the top of the income ladder, who are taxed at higher rates. Those two factors caused individual income tax receipts to grow twice as fast as personal income. As a result, CBO's estimate of such receipts fell \$61 billion short of the actual amount.

Corporate income tax receipts also exceeded expectations in 1997—although by a smaller amount, \$3 billion—consistent with stronger-than-expected corporate

profits. Legislation reinstating some excise taxes in 1997 was responsible for another \$3 billion of the revenue increase. And because wages were somewhat higher than expected, higher receipts from payroll taxes for social insurance programs contributed an additional \$5 billion.

The \$61 billion underestimate of individual income tax receipts cannot be thoroughly explained until tax returns for 1997 have been filed and the data processed—sometime late this year. Nevertheless, a considerable amount of information has become available in the past few months that allows much of the story to be told.

CBO's largest single underestimate occurred in the area of nonwithheld income taxes, which primarily represented final 1996 payments made in April 1997 and estimated payments made throughout the year. Final payments were about \$25 billion higher than CBO had projected—accounting for 40 percent of the underestimate of individual income tax receipts. According to preliminary data from the Internal Revenue Service based on 1996 tax returns, about \$20 billion of that \$25 billion represented taxes on capital gains realizations and \$5 billion reflected a timing shift, as taxpayers waited until the following April to pay a surprisingly large fraction of their 1996 tax liabilities. Al-

though the strength of the stock market in 1996 was apparent, the full magnitude of taxable realizations that would result from it was not.

The other \$14 billion of the underestimate of nonwithheld income taxes—mostly quarterly estimated taxes paid in 1997—reflects larger receipts from capital gains realizations, proprietorships, partnerships, and interest and dividends. Estimates of income from those sources (other than gains) are based on projections of NIPA data. Last summer, the NIPA estimates of non-wage income in 1996 were revised upward by about 5 percent, and CBO raised its projections for 1997 by a similar amount. That additional nonwage income explains about half of the extra \$14 billion in receipts for 1997.

The total amount of tax withheld from people's paychecks is based largely on the level of wages and salaries, which is also a component of the NIPAs.

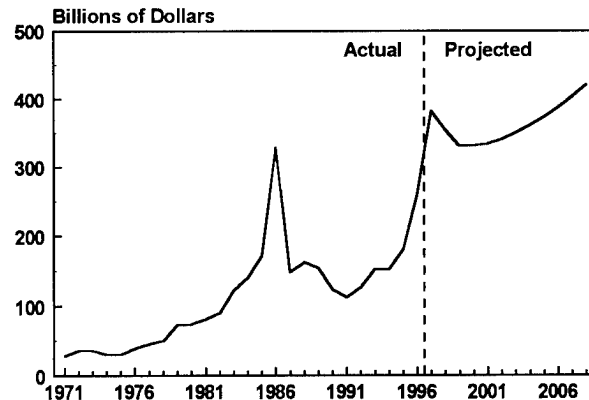
Table 3-2.
Actual Federal Revenues in Fiscal Year 1997,
by Source, Compared with CBO's January 1997
Projections (In billions of dollars)

Source	Actual Revenues	CBO's January 1997 Projections	Difference
Individual Income Taxes			
Withheld	580	562	19
Nonwithheld	251	212	39
Refunds	-94	-97	3
Subtotal	737	676	61
Corporate Income Taxes	182	179	3
Social Insurance Taxes	539	534	5
Excise Taxes	57 ^a	54	3
All Other Revenue Sources	63	64	-1
Total	1,579	1,507	72

SOURCE: Congressional Budget Office.

a. Includes \$3 billion from the reimposition of airport excise taxes, which was enacted in February 1997.

Figure 3-3.
The Rise in Capital Gains Realizations
(By calendar year)



SOURCE: Congressional Budget Office.

NOTE: The spike in 1986 occurred because taxpayers rushed to realize capital gains before an increase in the tax rate took effect in 1987.

About \$10 billion of CBO's \$19 billion underestimate of withheld tax receipts is attributable to a small underestimate of projected growth in wage and salary income. A small underestimate of a \$3.8 trillion revenue source, however, can amount to a nontrivial sum.

The rest of the unexpected 1997 revenues from individual income taxes is likely to have resulted, at least in part, from higher-than-expected effective tax rates. Future revisions to the NIPAs may increase the income statistics for 1996 and 1997 and make them more consistent with 1997 revenues. But such revisions are unlikely to be large enough to explain all of last year's revenue growth.

Capital Gains

Capital gains realizations—income from the sale of capital assets, such as stocks and real estate—leaped by about 45 percent in 1996. That represented the second highest one-year jump ever, exceeded only in 1986, when taxpayers rushed to realize capital gains before the tax rate went up at the beginning of 1987 (see Figure 3-3). Because taxpayers pay most of their taxes on such gains with their final tax returns the following year, the surge in 1996 played an important role in the

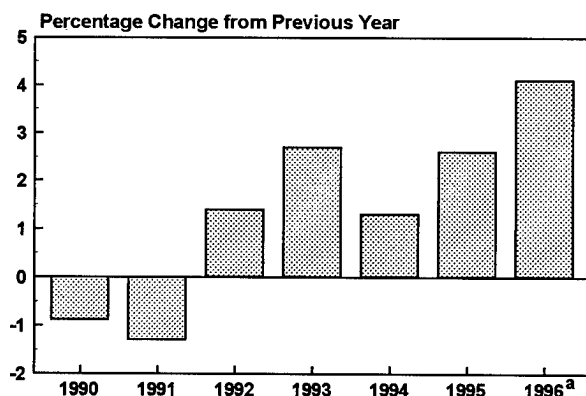
strong revenue growth of 1997. (Even in such an extraordinary year, however, capital gains tax receipts accounted for less than 5 percent of total revenues.)

CBO was expecting above-average growth in capital gains realizations in 1996 because of various factors: the continued strength of the economy, high stock prices in 1996, and the recovery of the commercial real estate market. However, CBO did not anticipate 45 percent growth—especially not during a year in which some owners of capital assets might have delayed selling them in anticipation of the cut in the tax rate that the Congress was considering.

Higher Effective Tax Rates on Personal Income

The recent trend of growing income, particularly among high-income taxpayers, seems likely to have played a role in boosting tax receipts by pushing up the effective income tax rate—the ratio of total income taxes paid to total adjusted gross income (AGI). Since 1992, each dollar of AGI has yielded more income tax. The effective income tax rate jumped by 2.6 percent in 1995 and

Figure 3-4.
Recent Growth in the Effective Income Tax Rate
(By calendar year)

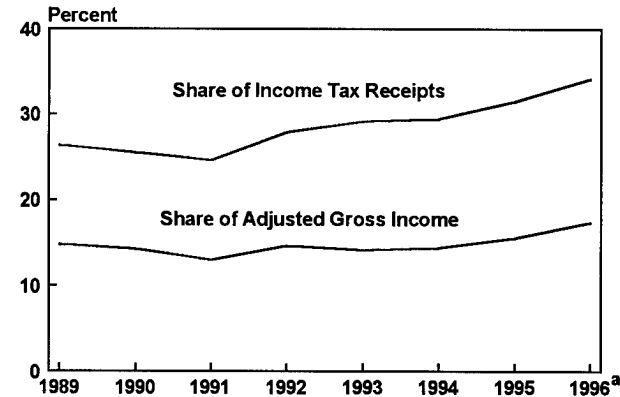


SOURCE: Congressional Budget Office.

NOTE: The effective income tax rate is the ratio of total income taxes paid to total adjusted gross income.

a. Based on tax returns processed through November 1997.

Figure 3-5.
High-Income Taxpayers' Share of Total Income
and Income Tax Receipts (By calendar year)



SOURCE: Congressional Budget Office.

NOTE: High-income taxpayers are defined as those with adjusted gross income of \$200,000 or more, in 1996 dollars.

a. Based on tax returns processed through November 1997.

by 4.1 percent in 1996, increasing from a level of 13.7 percent to 14.6 percent (see Figure 3-4). A further increase in 1997 would explain some of that year's additional revenues. Small changes in the effective tax rate have a powerful effect on revenues: each 1 percent increase yields an additional \$8 billion.

The rise in the effective income tax rate in 1995 and 1996 came in the absence of any legislated change in tax rates. Earlier, the effective rate increased after enactment of the Omnibus Budget Reconciliation Act of 1993, which raised statutory tax rates for high-income families. Those higher rates led to a wider disparity between the tax rates for high-income taxpayers and those for the average taxpayer. Thus, the income tax system has grown more sensitive to the distribution of income.

Part of the increase in the effective tax rate in 1995 and 1996 reflects a rise in the share of adjusted gross income attributable to high-income taxpayers (see Figure 3-5). Taxpayers with income of \$200,000 or more (in 1996 dollars) accounted for 17 percent of total AGI in 1996, up from 16 percent in 1995 and 14 percent in 1994. People at that income level made up just over 1 percent of people filing returns in each of those years.

The increased share of AGI going to high-income taxpayers did not result because the incomes of other taxpayers failed to grow, however. Incomes generally rose across the board between 1994 and 1996. The growth was simply greater among the highest-income people. Commensurate with their higher share of income was a higher share of income taxes. Taxpayers with income of \$200,000 or more paid 34 percent of all taxes in 1996, up from 32 percent in 1995 and 30 percent in 1994.

Sources of Growth for High-Income Taxpayers

Much of the recent income growth for high-income taxpayers came in the form of increased taxable compensation. Likely sources of that higher compensation are bonus payments, the increased use of stock options, and rapid growth in partnership income. Pinning down the exact role of each form of compensation is not possible. But aggregate data on wage and salary income and partnership income, as well as partial data on stock options, suggest that those sources contributed to last year's surge in individual income tax receipts.

Increased compensation from bonuses and stock options would not necessarily raise total receipts, however. Bonuses and options are alternative forms of employee compensation, so corporations can deduct them from their income tax liabilities as a cost of doing business. As a result, people receiving bonuses and stock options would pay more income tax, but companies offering them would pay less.

Although considerable anecdotal information suggests that bonuses are increasing, no aggregate data on their value are available. In the case of stock options, by contrast, employer surveys show that workers are receiving a growing share of their compensation in that form. "Nonqualified stock options," the dominant type, give employees the right to purchase the employer's stock in the future at the option price, no matter how high the actual price has risen by then. When granting an option, employers typically use the current market price of their stock as the option price and require that the option be exercised (used to purchase stock) within 10 years. When employees exercise an option, its value is added to their taxable wage income, and the employer

receives an equivalent tax deduction for wages paid. The employee's additional wage income equals the difference between the market value of the stock when the option is exercised and the amount actually paid for the stock.

Over the past several years, rapid growth in both stock prices and grants of employee stock options have caused the taxable value of exercised options to jump dramatically. Aggregate data do not exist on activity from employee stock options, but some partial data suggest that the taxable value of exercised options roughly doubled in 1995, doubled again in 1996, and continued to grow rapidly in 1997. Those data suggest that the high value of exercised options may have contributed an extra \$5 billion in withheld and nonwithheld individual income tax receipts for 1997 and could boost such receipts again this year.

The current healthy economy is also producing rapidly growing income from partnerships. In a partnership, all of the business's income is allocated directly to the partners, who pay estimated taxes on it under the individual income tax. Preliminary data show that income from partnerships and small business corporations grew by 19 percent in 1996, compared with an average growth rate of 13 percent a year in 1993 through 1995.

Revenue Estimates for 1998 and 1999

CBO expects revenues to continue growing in 1998—setting a post-World War II record at 19.9 percent of GDP. But the rate at which they grow will slow considerably. Total revenues increased by 8.7 percent in 1997. By contrast, CBO projects that they will rise by 5.4 percent in 1998 and 3.8 percent in 1999 (see Table 3-3). As a result of that slower growth, revenues would begin to decline as a share of GDP in 1999.

The slowdown in revenue growth projected for 1998 comes entirely from individual income tax receipts—especially nonwithheld tax receipts. Individual and corporate receipts together account for most of the further slowing of revenue growth in 1999. One reason such receipts will rise less rapidly is that total taxable

income is projected to do likewise. The two sources of income that are taxed at the highest rate—the wages and salaries of individuals and the profits of corporations—have grown more rapidly than GDP in recent years (see Figure 3-6). That gap is projected to be much smaller in 1998, and by 1999, income growth will fall short of GDP growth. The effect on 1998 revenues

will be limited, however, because robust growth continued into the first quarter of the fiscal year and because the slowdown in 1998 most strongly affects profits, on which income taxes are paid with a lag.

In estimating revenues for the next two years, CBO expects most of the factors that led to their growth in

Table 3-3.
Revenues, by Source, Since Fiscal Year 1985

Fiscal Year	Individual Income Taxes			Corporate Income Taxes	Social Insurance Taxes and Contributions	Excise Taxes and All Other Reve- nue Sources	Total Revenues
	Withheld	Nonwithheld	Total ^a				

In Billions of Dollars							
1985	299	101	335	61	265	73	734
1986	315	106	349	63	284	73	769
1987	322	143	393	84	303	75	854
1988	341	132	401	95	334	79	909
1989	361	155	446	103	359	83	991
1990	388	151	467	94	380	92	1,032
1991	404	143	468	98	396	93	1,055
1992	408	149	476	100	414	101	1,091
1993	430	155	510	118	428	99	1,154
1994	460	160	543	140	461	114	1,259
1995	500	176	590	157	484	120	1,352
1996	533	212	656	172	509	115	1,453
1997	580	251	737	182	539	120	1,579
1998 ^b	614	255	768	197	573	127	1,665
1999 ^b	639	261	782	200	600	147	1,729

Percentage Change from Previous Year							
1986	5.3	4.6	4.3	3.0	7.1	0.2	4.8
1987	2.4	34.9	12.5	32.9	6.8	1.8	11.1
1988	5.9	-7.5	2.2	12.6	10.2	6.3	6.4
1989	5.8	17.1	11.1	9.3	7.5	4.4	9.0
1990	7.5	-2.3	4.8	-9.5	5.7	10.6	4.1
1991	4.1	-5.7	0.2	4.9	4.2	1.7	2.2
1992	1.0	4.7	1.7	2.2	4.5	8.9	3.4
1993	5.4	3.6	7.1	17.2	3.5	-2.4	5.8
1994	6.8	3.4	6.5	19.5	7.7	15.0	9.0
1995	8.7	9.8	8.7	11.8	5.0	5.6	7.4
1996	6.6	20.7	11.2	9.4	5.1	-3.9	7.5
1997	8.8	18.2	12.3	6.1	5.9	3.8	8.7
1998 ^b	5.8	1.8	4.2	7.9	6.2	6.1	5.4
1999 ^b	4.1	2.3	1.7	1.7	4.8	15.6	3.8

SOURCE: Congressional Budget Office.

a. Because it includes tax refunds, this total is less than the sum of withheld and nonwithheld individual income taxes.

b. Projected.

1997—including burgeoning revenues from capital gains realizations and a high effective income tax rate—to persist. But it does not expect those factors to continue to pick up steam.

Capital gains realizations, for example, probably increased in 1997 by about the same percentage as in 1996. Among the reasons for that are the continuing strong performance of businesses, the booming stock market in 1997, and the substantial "unlocking" of long-held assets after the Taxpayer Relief Act cut the top tax rate on gains from 28 percent to 20 percent. However, that lower tax rate means the growth in capital gains tax receipts—about 7 percent in 1998, CBO projects—will be much less than the growth in realizations. Realizations are expected to decline in 1998, contributing to slower revenue growth in 1999 (see Figure 3-3 on page 50).

An increase in the effective tax rate on adjusted gross income probably accounted for a substantial part of last year's revenue growth. CBO expects that rate to remain at its current (high) level but not to grow further, so it will not cause any change in revenues this year.

CBO believes the timing shift in 1996 individual income tax payments that added about \$5 billion to 1997 revenues was a one-time occurrence. The expect-

tation is that taxpayers, having had more of their 1997 taxes withheld or paid through quarterly estimated payments, will make a smaller fraction of 1997 payments this April. That assumption reduces revenue growth in 1998 by about 0.5 percentage points.

In addition, the first effects of last year's tax cuts will lower revenue growth in 1998 by roughly half a percentage point. The legislation is expected to have about the same effect on total revenues the following year as in 1998. As a result, the 1999 growth rate will be unaffected.

Risks to the Revenue Estimates

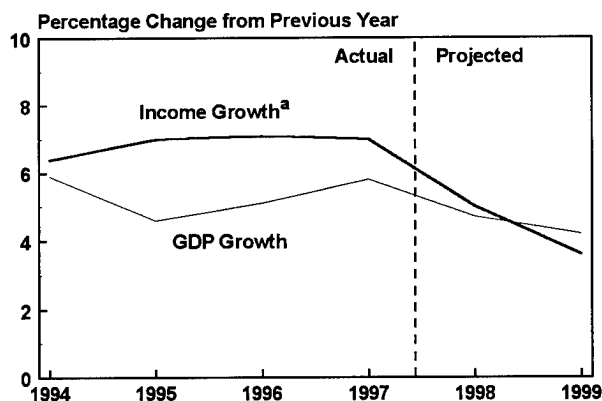
As estimators were reminded in 1997, predicting revenues for even the current year is a challenge. CBO's revenue projections are affected by the various uncertainties in its economic forecast, which were detailed in Chapter 1. Even if the economy performs exactly as expected, however, a number of other factors make the revenue projections uncertain.

Uncertainty About the Economy

Any differences between the actual performance of the economy and CBO's assumptions will lead to errors in the revenue estimates. Revenues are sensitive to the total level of GDP. For example, if the economy grew by 1 percentage point more in fiscal year 1998 than is forecast—which would keep it roughly at last year's growth rate—revenues would be about \$18 billion higher in 1998 than projected (see Table 3-4). A slower-growing economy would reduce revenues by a similar amount.

The revenue estimates are also sensitive to the mix of income types. Wages and salaries and corporate profits are taxed at higher rates than other types of income, which are often received in forms that are exempt from taxation. If GDP in fiscal year 1998 matched CBO's forecast but the share of GDP consisting of wages and profits was 1 percentage point higher, revenues would be about \$25 billion higher than anticipated. A 1 percentage-point lower share for wages and profits would reduce revenues by \$25 billion.

Figure 3-6.
Annual Growth of Income and GDP
(By calendar year)



SOURCE: Congressional Budget Office.

a. Income is defined as the most highly taxed sources: wages and salaries, and corporate profits.

Uncertainty About Other Factors

The factors that contributed to last year's large revenue increase also make this year's revenue projections uncertain. An additional unknown this year is how people will respond to the tax changes enacted last summer.

Capital Gains. Capital gains realizations are always volatile. Their 45 percent jump in 1996 accounted for

about \$20 billion of the unexpected revenue in 1997. Information about realizations in 1997 is not yet available because the only source of such data is tax returns, which are just beginning to be filed. The level of realizations last year is particularly uncertain because of large swings in the stock market and the reduction in the tax rate on gains during the year.

In projecting another 45 percent rise in realizations in 1997, CBO estimates that much of the growth

Table 3-4.
Effect of Alternative Outcomes on CBO Revenue Projections for 1998

Outcome Assumed by CBO	Alternative Outcome	Effect of Alternative on 1998 Revenues (Billions of dollars)
Overall Level of GDP		
Grows by 5 percent in 1998	Grows 1 percentage point more in 1998 than forecast	18
	Grows 1 percentage point less in 1998 than forecast	-18
Mix of Income Types		
Wages and profits make up 58 percent of GDP in 1998	Share of GDP made up of wages and profits is 1 percentage point higher	25
	Share of GDP made up of wages and profits is 1 percentage point lower	-25
Capital Gains Realizations		
Grew by 45 percent in 1997	Grew by 65 percent in 1997	10
	Grew by 25 percent in 1997	-10
Timing of Tax Payments on 1997 Liabilities		
Fraction paid in April 1998 is 1 percentage point less than last year	Fraction paid in April 1998 resembles that of the early 1990s	-20
	Fraction paid in April 1998 is same as last year	7
Distribution of Income		
Remained at current level in 1997	Shifted toward high-income taxpayers as much in 1997 as in 1996 (thus raising the effective tax rate on AGI)	15
	Shifted back toward middle- and low-income taxpayers (undoing the 1996 change in the effective tax rate)	-15
Effects of New Tax Legislation		
Taxpayers eligible for new credits wait to claim them on tax returns filed in early 1999	Taxpayers eligible for new credits adjust their withholding during 1998 to account for the credits	-13

SOURCE: Congressional Budget Office.

NOTE: AGI = adjusted gross income.

stemmed from taxpayers' response to the rate cut. Some of that was a short-term response to the lower rate (the "unlocking" effect), and some was a permanent increase in the level of realizations because of the new rate. If, however, 1997 gains actually grew by 65 percent (either because of a larger response to the rate change or because of sales induced by uncertainty in the stock market), revenues in 1998 would be \$10 billion higher than projected. If, by contrast, gains increased by 25 percent, revenues in 1998 would be \$10 billion lower than projected.

Timing of Tax Payments. Because the income tax system gives taxpayers substantial flexibility in the timing of their tax payments, final payments made in April are particularly variable. Thus, even though most of the withholding on 1997 income and all but one estimated tax payment had been made at the time of CBO's projections, the amount of 1997 tax liabilities that will be paid during 1998 could still vary over a wide range.

CBO's assumption that liabilities were paid more quickly in 1997 than in 1996 (although still on a slower schedule than in the early 1990s) could turn out to be wrong. If some of the extra revenues seen during 1997 reflected a return to the payment rate of the early 1990s, then more of 1997's liabilities have already been paid, final payments in 1998 will be lower, and revenues in 1998 could be \$20 billion lower than projected. If, instead, taxpayers have left the same fraction of liabilities to be paid in April as last year, 1998 revenues will be about \$7 billion higher than predicted.

Income of High-Income Taxpayers. Changes in the distribution of income can lead to small but significant changes in the effective tax rate on AGI. If bonuses and stock options continued to increase rapidly in 1997, that rate may have moved higher than CBO estimates. Another very large change like the one that occurred in 1996 could add \$15 billion to revenues. Alternatively, tight labor markets could drive the effective tax rate down by a similar amount if the growth in wages for average-income taxpayers "catches up" with the recent growth for high-income taxpayers. In that case, revenues would be \$15 billion lower than predicted.

Recent Tax Legislation. The Taxpayer Relief Act contained new tax credits for children under 17 and for education expenses. How and when eligible taxpayers

react to those new credits will influence 1998 revenues. CBO assumes that most taxpayers will wait to claim the credits when they file their April 1999 tax returns. But if all of the eligible taxpayers lowered their withholding this year to account for the full amount of their expected credits, revenues in 1998 would be as much as \$13 billion below CBO's projection.

The Longer-Term Revenue Outlook

Unless tax laws change, revenues will continue to be relatively high as a percentage of GDP for the next 10 years. CBO expects that to be the case despite last year's tax cuts, which will lower revenues by about 0.3 percent of GDP in 2000 and later years. Under baseline assumptions, CBO projects that total revenues will decline only slightly, from 19.6 percent of GDP in 2000 to 19.3 percent in 2008.

Since 1960, some striking shifts have occurred in the composition of revenues (see Figure 3-7). One of the most visible shifts is the government's increasing reliance on receipts from social insurance taxes (now about 7 percent of GDP), which are largely generated by payroll taxes that fund Social Security and Medicare's Hospital Insurance program. Another change is the government's diminishing reliance on receipts from corporate income taxes and excise taxes (now about 2 percent and 1 percent of GDP, respectively). Individual income tax receipts—the largest contributor to government coffers—have fluctuated in the range of 8 percent to 9 percent of GDP for three decades. Through 2008, CBO expects them to hover around 9 percent. Social insurance tax receipts are expected to remain stable during that period, while corporate and excise tax receipts will decline slightly.

The shift in the composition of revenues is also apparent when each source is viewed as a share of total revenues. Social insurance taxes now contribute 35 percent of revenues, up from 25 percent a quarter-century ago. The share attributable to corporate income and excise taxes, by contrast, has declined from 25 percent in 1970 to 15 percent today. The other sources have held steady for several decades: individual income taxes at close to 45 percent of total revenues, and other

sources of revenues at about 5 percent. (For more detailed historical data, see Appendix E, which lists annual revenues from each of those sources since 1962.)

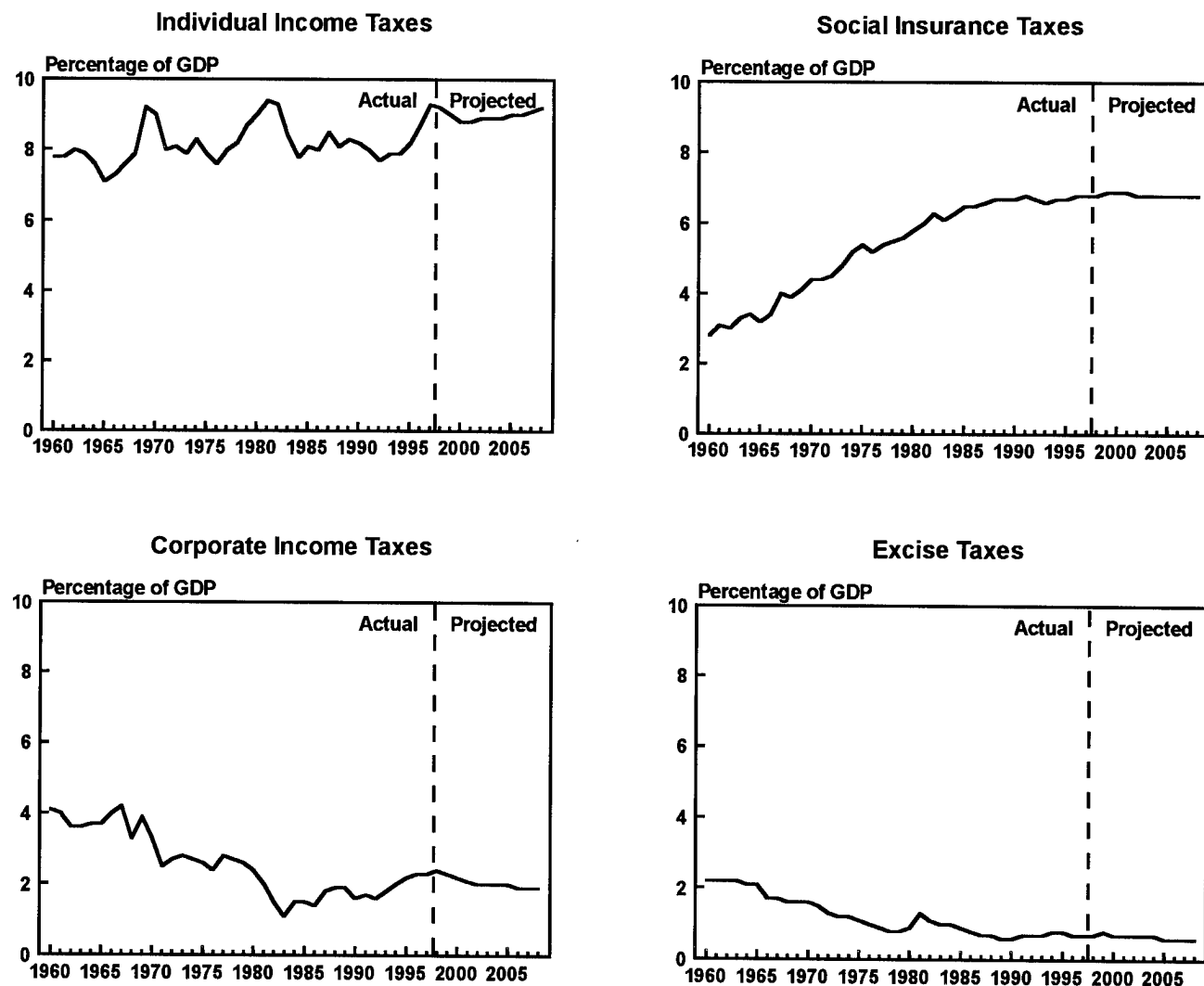
Like federal revenues, the revenues of state and local governments are above their typical level relative to GDP. Combined federal, state, and local government revenues, as measured with NIPA data, claimed nearly 32 percent of GDP in 1997. Although that was the highest peacetime level ever, it was still below the GDP share in most other industrialized countries. In 1995 (the latest year for which data are available), revenues

averaged over 37 percent of GDP in member countries of the Organization for Economic Cooperation and Development.

Individual Income Taxes

Individual income tax receipts as a share of GDP are projected to decline from 9.3 percent in 1997 to 8.8 percent in 2000 (see Table 3-5). Several factors contribute to that decrease. Tax receipts from capital gains realizations are projected to return to levels more con-

Figure 3-7.
Revenues, by Source, as a Share of GDP (By fiscal year)



SOURCE: Congressional Budget Office.

Table 3-5.
CBO Projections for Individual, Corporate, and Social Insurance Receipts and Their Tax Bases
(By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Individual Income Tax Receipts and Tax Base												
Individual Income Tax Receipts												
In billions of dollars	737	768	782	805	840	886	922	974	1,027	1,083	1,143	1,207
As a percentage of GDP	9.3	9.2	9.0	8.8	8.8	8.9	8.9	8.9	9.0	9.0	9.1	9.2
Taxable Personal Income												
In billions of dollars	5,573	5,881	6,121	6,360	6,623	6,909	7,220	7,555	7,902	8,264	8,641	9,035
As a percentage of GDP	69.9	70.3	70.1	69.9	69.7	69.6	69.4	69.3	69.1	69.0	68.9	68.8
Individual Receipts as a Percentage of Taxable Personal Income	13.2	13.1	12.8	12.7	12.7	12.8	12.8	12.9	13.0	13.1	13.2	13.4
Corporate Income Tax Receipts and Tax Base												
Corporate Income Tax Receipts												
In billions of dollars	182	197	200	200	200	203	209	216	224	232	241	250
As a percentage of GDP	2.3	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9
Corporate Profits												
In billions of dollars	785	817	810	809	817	832	861	891	917	950	980	1,019
As a percentage of GDP	9.8	9.8	9.3	8.9	8.6	8.4	8.3	8.2	8.0	7.9	7.8	7.8
Taxable Corporate Profits ^a												
In billions of dollars	554	590	585	581	587	597	618	643	664	691	715	745
As a percentage of GDP	6.9	7.0	6.7	6.4	6.2	6.0	5.9	5.9	5.8	5.8	5.7	5.7
Corporate Receipts as a Percentage of Taxable Profits	32.9	33.4	34.2	34.4	34.1	34.1	33.8	33.6	33.7	33.6	33.7	33.5
Social Insurance Tax Receipts and Tax Base												
Social Insurance Tax Receipts												
In billions of dollars	539	573	600	625	651	679	710	743	781	817	856	892
As a percentage of GDP	6.8	6.8	6.9	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Wages and Salaries												
In billions of dollars	3,811	4,045	4,235	4,421	4,616	4,826	5,060	5,312	5,572	5,840	6,120	6,410
As a percentage of GDP	47.8	48.3	48.5	48.6	48.6	48.6	48.6	48.7	48.7	48.8	48.8	48.8
Social Insurance Receipts as a Percentage of Wages and Salaries	14.2	14.2	14.2	14.1	14.1	14.1	14.0	14.0	14.0	14.0	14.0	13.9

SOURCE: Congressional Budget Office.

NOTE: The tax bases in this table reflect income as measured by the national income and product accounts rather than as reported on tax returns.

- a. Taxable corporate profits are defined as economic profits net of the capital consumption and inventory valuation adjustments; profits earned by the Federal Reserve System, transnational corporations, and S corporations; and payments of state and local corporate taxes. They include capital gains realized by corporations.

sistent with the size of the economy and the tax rate on gains. Because CBO expects the growth of the stock market to slow and the one-time unlocking effect of last year's rate cut to disappear, it projects that capital gains receipts will rise more slowly than GDP between 1997 and 2003. Also, the first significant impact of the Taxpayer Relief Act on individual income tax receipts will be felt in fiscal year 1999, when the law is expected to reduce them as a share of GDP by 0.3 percentage points. The new tax credits for education and children account for over 80 percent of that reduction.

After 2001, individual income tax receipts as a share of GDP should begin a slow, steady climb back nearly to the level projected for this year. One reason is that although total taxable personal income declines slightly as a share of GDP between 2000 and 2008, the most important component of the income tax base—wages and salaries—rises by 0.2 percentage points. A more important reason is that even when tax law remains constant, individual receipts tend to rise over time as a share of GDP because income growth above the rate of inflation pushes taxpayers into higher brackets, causing more income to be taxed at higher rates. Those trends should be more than large enough to offset the dampening effects of the Taxpayer Relief Act, which is projected to continue reducing individual income tax receipts by between 0.3 and 0.4 percentage points a year through 2008.

Corporate Income Taxes

CBO projects that corporate income tax receipts as a percentage of GDP will decline over the next 10 years because corporate profits will fall as a share of GDP (see Table 3-5). Corporate tax receipts peak in 1998 at 2.4 percent of GDP and then steadily decline by 0.1 percentage point per year through 2002. Over that period, taxable corporate profits as a share of GDP fall by a full percentage point to 6 percent. The relative decline in the taxable profit share over those four years (15 percent) is slightly greater than the decline in the corporate receipts share (13 percent). As a result, the average tax rate—total corporate receipts as a percentage of total taxable profits—rises slightly, from 33.4 percent in 1998 to over 34 percent in each of the next four years.

CBO expects the average corporate tax rate to rise in part because several tax credits will expire in the next few years and because the outlook for profits is weak. When total corporate profits in dollar terms fall from one year to the next—as projected from 1998 to 2000—it typically means that more companies are generating losses (negative profits). In general, firms cannot completely use those losses to reduce tax payments, because the corporate income tax does not treat gains and losses symmetrically. To the extent that such losses reduce total profits without reducing tax payments, the average tax rate rises.

Beyond 2002, corporate income tax receipts as a share of GDP will continue to decline but at a very slow rate, CBO projects, consistent with the slow decline of profits as a share of GDP. In dollar terms, however, profits will begin rising again. As a result, the average tax rate will reverse course and start to fall slowly, returning by 2008 almost to its 1998 level.

Social Insurance Taxes

CBO expects social insurance tax receipts to track GDP closely over the next decade (see Table 3-5). From 1997 to 1999, social insurance receipts are expected to increase slightly as a share of GDP, because wages and salaries will do the same in those years.

Beyond 1999, the growth of wages and salaries as a share of GDP slows to a crawl. Consequently, social insurance receipts as a percentage of GDP will stabilize and then begin to decline slowly. The main reason for the decline is the projected steady erosion of unemployment insurance receipts produced by decreasing outlays for unemployment insurance. Although unemployment insurance receipts are a very small component of social insurance taxes, their decline causes social insurance receipts as a percentage of wages and salaries to fall slightly over the 10-year period.

Excise Taxes and Other Revenue Sources

Excise taxes, a smaller source of revenues, are expected to continue their long-term decline as a percentage of

Table 3-6.
Effect of Extending Tax Provisions That Will Expire Before 2008 (By fiscal year, in billions of dollars)

Tax Provision	Expiration Date	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Provisions Expiring in 1998												
Deduction for Contributions to Private Foundations	6/30/98	a	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Credit for Research and Experimentation	6/30/98	-0.5	-1.2	-1.7	-2.1	-2.3	-2.5	-2.7	-2.8	-2.9	-3.1	-3.2
Extension of Generalized System of Preferences	6/30/98	-0.1	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4
Work Opportunity Tax Credit	6/30/98	-0.1	-0.3	-0.5	-0.6	-0.6	-0.7	-0.7	-0.7	-0.8	-0.8	-0.9
Nonconventional Fuels Credit for Fuel from Biomass and Coal	6/30/98	b	a	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4
Provisions Expiring in 1999												
Welfare-to-Work Tax Credit	4/30/99	n.a.	a	a	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Railroad Uses of Diesel Fuel, 1.25 Cents per Gallon	9/30/99	n.a.	n.a.	b	b	b	b	b	b	b	b	b
Credits for Electricity Production from Wind and Biomass	5/31/99-wind 6/30/99-biomass	n.a.	b	a	a	a	a	a	-0.1	-0.1	-0.1	-0.1
Provisions Expiring in 2000												
Brownfields Environmental Remediation	12/31/00	n.a.	b	b	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Exclusion for Employer-Provided Education Assistance	5/31/00	n.a.	n.a.	-0.1	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.5	-0.6
Income Averaging for Farmers	12/31/00	n.a.	n.a.	n.a.	a	a	a	a	a	a	a	a
Corporate Contributions of Computers to Schools	12/31/00	n.a.	n.a.	n.a.	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
District of Columbia First-Time Homebuyer Credit	12/31/00	n.a.	n.a.	n.a.	a	a	a	a	a	a	a	a
Provisions Expiring in 2001												
Andean Trade Preference Initiative	12/4/01	n.a.	n.a.	n.a.	n.a.	a	a	a	a	a	a	a
Tax Credit for Electric Vehicles	12/31/01	n.a.	n.a.	n.a.	n.a.	a	a	a	a	a	a	a
Deductions for Clean-Fuel Vehicles and Refueling Property	12/31/01	n.a.	n.a.	n.a.	n.a.	a	a	a	a	a	a	a
Provisions Expiring in 2002												
Tax Incentive for Investment in the District of Columbia	12/31/02	n.a.	a	a	a	a	-0.1	-0.1	-0.1	-0.1	-0.2	-0.2
Luxury Tax on Passenger Vehicles	12/31/02	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.2	0.2	0.2	0.2	0.2
Provisions Expiring in 2003												
IRS User Fees	9/30/03	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	b	0.1	0.1	0.1	0.1
Provisions Expiring in 2007												
FUTA Surtax of 0.2 Percentage Points	12/31/07	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.6

SOURCE: Joint Committee on Taxation.

NOTE: n.a. = not applicable; IRS = Internal Revenue Service; FUTA = Federal Unemployment Tax Act.

a. Loss of less than \$50 million.

b. Gain of less than \$50 million.

GDP, falling to just under 0.6 percent by 2008 from their 1997 level of 0.7 percent. Most excise taxes—those representing about 80 percent of total excise revenues—are levied per unit of good or per transaction rather than as a percentage of value. Thus, they do not grow in tandem with the economy.

Unlike social insurance taxes or corporate income taxes, excise taxes were significantly affected by recent tax legislation. Most of the revenue increases in the Taxpayer Relief Act came from restoring aviation taxes (which were about to expire) and raising them slightly. In addition, the Balanced Budget Act of 1997 boosted cigarette taxes. Those changes keep the long-term decline in excise tax receipts from being even greater than projected.

Estate and gift taxes were the only other revenue source significantly affected by the Taxpayer Relief Act. Once the changes in that act take full effect, by 2007, receipts from estate and gift taxes will be almost 0.1 percent lower as a share of GDP. The changes will offset what would have been an upward drift in those tax receipts as a share of GDP—leaving the projected share in 2008 almost identical to this year's figure.

Expiring Provisions

CBO's revenue projections assume that current tax law remains unchanged and that scheduled changes and expirations occur on time. The sole exception to that approach is the expiration of excise taxes dedicated to trust funds. Under the rules governing how CBO constructs its baseline, those taxes are included in the revenue projections even if they are scheduled to expire.

The largest trust fund excise taxes that are slated to expire during the next decade are those for the Highway Trust Fund, which run out on September 30, 1999. Extending those taxes at today's rates contributes about \$27 billion to CBO's revenue projections by 2008—about one-third of total excise tax receipts. Taxes dedicated to the Airport and Airway Trust Fund are scheduled to expire at the end of 2007. Extending them adds \$15 billion in revenues in 2008. Taxes for the Leaking Underground Storage Tank Trust Fund are set to expire on March 31, 2005. Extending them adds \$200 million in 2008.

All other expiring tax provisions are not automatically extended in CBO's projections. Five such provisions that were temporarily extended last summer will expire this year (see Table 3-6). The revenue projections assume that those provisions will not be extended. If the Congress extended all five at least through the projection period, revenues would be about \$3.5 billion smaller than projected in 2002 and \$5 billion smaller in 2008.

Another 15 tax provisions are slated to expire between 1999 and 2008. Extending the exclusion for employer-provided educational assistance would reduce revenues by roughly \$500 million per year after 2000. In addition, extending the welfare-to-work credit, incentives for investment in the District of Columbia, and incentives for remediation of polluted brownfields sites would each reduce revenues by around \$1 billion through 2008. Alternatively, extending the Federal Unemployment Tax Act surcharge beyond 2007 would raise revenues by \$1.6 billion in 2008, and extending the luxury tax on passenger vehicles beyond 2002 would raise revenues by about \$1 billion through 2008. Other expiring provisions would have smaller or negligible effects on the budget.

The Spending Outlook

The Congressional Budget Office expects that federal spending will total nearly \$1.7 trillion in 1998 and will grow under current policies to \$2.4 trillion by 2008—an average increase of 3.7 percent a year. That spending can be divided into several convenient categories, based on its treatment in the budget process.

Discretionary spending, which denotes programs controlled by annual appropriation acts, accounts for about one-third of the budget. Policymakers decide afresh each year how many dollars will be devoted to continuing existing activities and funding new ones. The baseline projections depict the path of discretionary spending as a whole, assuming that the Congress complies with the discretionary spending caps dictated through 2002 by the Balanced Budget Act of 1997.

All other spending is controlled by existing laws, and CBO's baseline projections of those outlays assume that the laws and policies remain unchanged. *Entitlements and other mandatory spending* constitute more than half of federal expenditures and consist overwhelmingly of such benefit programs as Social Security, Medicare, and Medicaid. The Congress generally controls spending for those programs by setting rules for eligibility, benefit formulas, and so on rather than by voting annually for dollar amounts.

Offsetting receipts—fees and similar charges that are recorded as negative outlays—are collected without legislative action unless the Congress revisits the underlying laws. They differ from revenues in that revenues are collected based on the government's powers of taxation, whereas offsetting receipts are collections

from other government accounts or payments from the public of a business nature (for example, rents and royalties from leases for oil and gas drilling on the Outer Continental Shelf).

Changes in *net interest* spending are driven by the government's deficits or surpluses and by market interest rates. In addition to the borrowing activities of the Department of the Treasury, the government both pays interest (for example, on late refunds issued by the Internal Revenue Service) and collects it from various sources (including direct loan financing accounts).

In total, federal spending now represents about 20 percent of gross domestic product but is projected to drop slowly to about 18 percent by 2008, assuming that discretionary spending grows with inflation after 2002 (see Table 4-1). In the 1960s, federal spending averaged about 19 percent of GDP; for the 1970s and 1980s, the figures were about 21 percent and 23 percent, respectively. A pronounced shift has taken place in the composition of such spending, though. The government today spends more proportionally on entitlement programs and net interest, and less on discretionary activities, than in the past (see Figure 4-1). Appendix E presents more detailed annual historical data for each of the broad categories of spending.

Discretionary Spending

Each year, the Congress starts the appropriation process anew. It votes on budget authority (the authority to commit money) for discretionary budget activities,

Table 4-1.
CBO Outlay Projections, Assuming Compliance with Discretionary Spending Caps (By fiscal year)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Discretionary Spending												
Defense	272	269	267	284	286	297	306	316	329	336	343	357
Violent crime reduction	2	4	5	6	6	6	6	6	6	7	7	7
Other nondefense	274	285	290	306	315	323	332	341	351	362	373	385
Unspecified reductions ^a	<u>0</u>	<u>0</u>	<u>0</u>	<u>-31</u>	<u>-42</u>	<u>-65</u>	<u>-68</u>	<u>-71</u>	<u>-78</u>	<u>-78</u>	<u>-79</u>	<u>-87</u>
Subtotal	549	557	561	565	564	560	576	592	609	626	643	661
Mandatory Spending	895	950	1,003	1,058	1,121	1,173	1,247	1,320	1,415	1,476	1,570	1,672
Offsetting Receipts	-86	-81	-81	-84	-90	-104	-96	-100	-106	-112	-119	-126
Net Interest	<u>244</u>	<u>244</u>	<u>248</u>	<u>244</u>	<u>238</u>	<u>231</u>	<u>226</u>	<u>222</u>	<u>216</u>	<u>209</u>	<u>202</u>	<u>194</u>
Total	1,601	1,670	1,731	1,782	1,833	1,860	1,954	2,034	2,133	2,199	2,297	2,403
On-budget	1,291	1,353	1,405	1,446	1,486	1,501	1,580	1,646	1,729	1,777	1,856	1,942
Off-budget ^b	311	318	326	336	347	359	373	388	404	422	441	460
As a Percentage of GDP												
Discretionary Spending												
Defense	3.4	3.2	3.1	3.1	3.0	3.0	2.9	2.9	2.9	2.8	2.7	2.7
Violent crime reduction	c	c	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other nondefense	3.4	3.4	3.3	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.0	2.9
Unspecified reductions ^a	<u>0</u>	<u>0</u>	<u>0</u>	<u>-0.3</u>	<u>-0.4</u>	<u>-0.7</u>	<u>-0.7</u>	<u>-0.7</u>	<u>-0.7</u>	<u>-0.7</u>	<u>-0.6</u>	<u>-0.7</u>
Subtotal	6.9	6.7	6.4	6.2	5.9	5.6	5.5	5.4	5.3	5.2	5.1	5.0
Mandatory Spending	11.2	11.3	11.5	11.6	11.8	11.8	12.0	12.1	12.4	12.3	12.5	12.7
Offsetting Receipts	-1.1	-1.0	-0.9	-0.9	-0.9	-1.0	-0.9	-0.9	-0.9	-0.9	-0.9	-1.0
Net Interest	<u>3.1</u>	<u>2.9</u>	<u>2.8</u>	<u>2.7</u>	<u>2.5</u>	<u>2.3</u>	<u>2.2</u>	<u>2.0</u>	<u>1.9</u>	<u>1.7</u>	<u>1.6</u>	<u>1.5</u>
Total	20.1	20.0	19.8	19.6	19.3	18.7	18.8	18.6	18.7	18.4	18.3	18.3
On-budget	16.2	16.2	16.1	15.9	15.6	15.1	15.2	15.1	15.1	14.8	14.8	14.8
Off-budget ^b	3.9	3.8	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.5

SOURCE: Congressional Budget Office.

a. These reductions represent the cuts that would be needed to comply with the statutory caps in 1999 through 2002 and the effects of those cuts projected into the future.

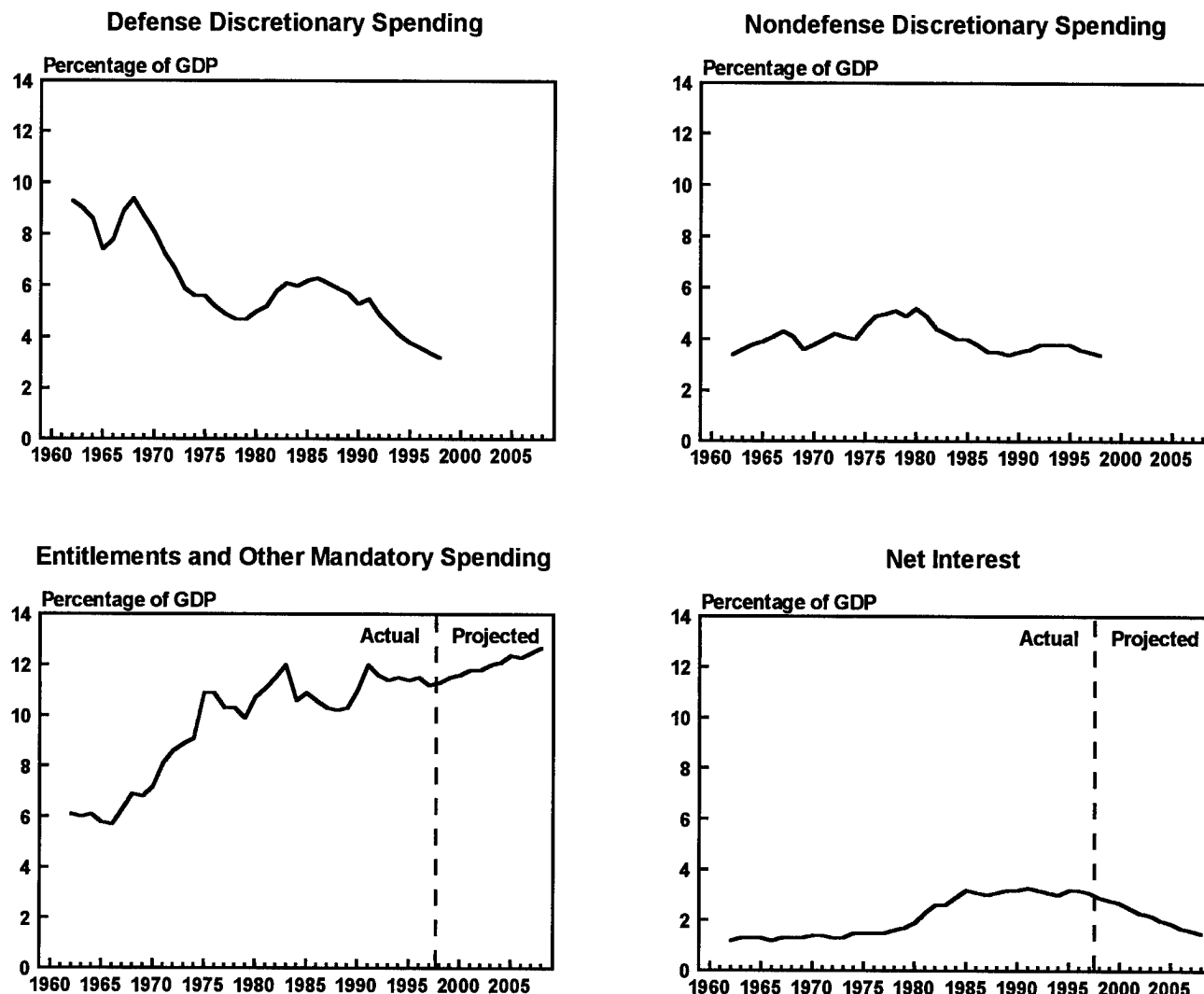
b. Social Security and the Postal Service.

c. Less than 0.05 percent of gross domestic product.

which then translates into outlays when the money is actually spent. In any given year, discretionary outlays also include spending from budget authority appropriated in previous years. In 1998, CBO expects that discretionary spending will make up one-third of total outlays, or \$557 billion—up about \$9 billion from the 1997 level. Under the caps specified in the Balanced

Budget Act, those outlays will remain almost constant in dollar terms between 1998 and 2002 but fall as a share of total spending to 30 percent. By 2008, assuming growth at the rate of inflation when the caps expire after 2002, CBO projects that discretionary spending will increase by 19 percent to \$661 billion (see Table 4-1).

Figure 4-1.
Outlays, by Category, as a Share of GDP



SOURCE: Congressional Budget Office.

NOTE: Discretionary spending is shown only through 1998 because its future path depends on unspecified reductions necessary to comply with the discretionary caps through 2002.

From 1999 through 2002, the CBO baseline assumes that the Congress will adhere to the caps on such spending. The calculations presented here include reductions that are assigned directly to the defense and nondefense categories in 1999 as well as more general reductions in discretionary spending that would be required to comply with the caps in 2000 through 2002, the ramifications of which extend through the end of the projection period. CBO makes no specific assumptions

in its projections about exactly where those reductions would be made.

Discretionary Spending and the Statutory Caps Through 2002

Individual caps apply to budget authority and outlays. Budget authority is the basic currency of the appropria-

tion process; it represents the permission to commit funds. That commitment always precedes actual outlays, or disbursements, with a short lag for fast-spending activities such as meeting payrolls or directly providing services and a longer lag for slow-spending activities such as the procurement of weapons or other complex items. Because the caps limit both budget authority and outlays, the more stringent one prevails.

Since 1991, dollar caps set by the Deficit Control Act of 1985 have restricted spending for discretionary programs. The caps appear to have played a key role in controlling the deficit, aided by the lower defense spending brought about by the end of the Cold War, which enabled defense programs to bear the brunt of any necessary restraint.

In 1998 and 1999, the Deficit Control Act specifies separate budget authority and outlay caps for defense, violent crime reduction, and other nondefense spending. In 2000, though, the number of sets of caps drops to two: one set for violent crime reduction and one set for all other discretionary appropriations. For 2001 and 2002, a single pair of caps covers all discretionary spending.

In 1998, the Congress boosted budget authority by more than \$17 billion over the 1997 level to accommodate various spending initiatives. However, between now and 2002, the caps on budget authority allow for a maximum increase of only \$24 billion. The 2002 total of \$551 billion is \$52 billion less than the amount of budget authority that would be required to maintain funding at the 1998 level adjusted for inflation.¹ Yet the caps on budget authority are more generous than an absolute freeze would be. Under a freeze at the 1998 level, budget authority in 2002 would total only \$530 billion (see Table 4-2).

The caps on outlays are more stringent than those on budget authority, given the current mix of discretionary programs. Although outlays in 1998 are expected to rise \$9 billion from their 1997 level, the caps allow only marginal changes over the following four years. Starting next year, when \$8 billion in outlays

will need to be cut from projected levels in both defense and nondefense spending, the caps will begin to pinch. The outlay cap level of \$560 billion in 2002 is almost \$1 billion less than the amount represented by a total freeze in budget authority and only \$3 billion higher than the expected 1998 level of discretionary spending. By 2002, outlays will have to be reduced by \$65 billion—or more than 10 percent—below the level that would preserve real resources.

Discretionary Programs After 2002

The discretionary caps expire after 2002, at which point such spending will have experienced minuscule annual growth (or none at all) for 12 years. The budget outlook after 2002 hinges, in part, on the amount of annual appropriations in those years and what, if anything, is done in the future with caps on discretionary spending. If discretionary spending keeps pace with inflation after 2002, the projected baseline surplus will reach \$138 billion in 2008. Alternatively, policymakers could opt to keep discretionary outlays frozen at the 2002 level, which would push the surplus up to \$256 billion, or 2.0 percent of GDP, by 2008. That result, however, would come at the price of steady erosion in the activities and services funded by those appropriations. Holding discretionary outlays through 2008 to their level in 2002 would represent a reduction of 30 percent in real terms from the level of spending in 1998.

Defense Discretionary Spending

The share of the budget that is devoted to defense has gradually shrunk over the past three decades. In 1962, defense spending constituted nearly half of the federal budget, but that percentage in 1998 is likely to be around 16 percent. There have been only two major interruptions in that declining trend: in the late 1960s during the Vietnam War and in the early 1980s with the Reagan-era defense buildup. Even the costs of Operation Desert Storm appear as barely a blip in the downward tendency. As a percentage of the economy, defense outlays today make up about 3.4 percent of GDP (see Figure 4-1). In dollar terms, defense outlays peaked at about \$300 billion annually in the 1989-1991 period (not counting estimated Desert Storm spending in that final year). At \$269 billion in 1998, defense outlays will be down about 10 percent from those levels

1. The Deficit Control Act specifies the variables to use in projecting an inflated baseline for discretionary spending. Federal personnel costs are inflated by the projected change in the employment cost index for wages and salaries (plus adjustments for other minor factors); all other spending is inflated by the GDP price index.

Table 4-2.
How Tight Are the Discretionary Caps? (By fiscal year, in billions of dollars)

	1999	2000	2001	2002
Budget Authority				
Caps ^a	533	537	542	551
Amount Needed to Preserve 1998 Real Resources				
Defense	277	286	294	303
Domestic and international	266	276	285	294
Violent crime reduction	<u>6</u>	<u>6</u>	<u>6</u>	<u>6</u>
Total	549	567	585	604
Amount over or under (-) caps	16	30	43	52
Amount Needed to Freeze 1998 Dollar Resources				
Defense	268	268	268	268
Domestic and international	256	256	256	256
Violent crime reduction	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
Total	530	530	530	530
Amount over or under (-) caps	-3	-7	-12	-21
Outlays				
Caps ^a	561	565	564	560
Amount Needed to Preserve 1998 Real Resources				
Defense	275	284	286	297
Domestic and international	298	306	315	323
Violent crime reduction	<u>5</u>	<u>5</u>	<u>6</u>	<u>6</u>
Total	577	596	606	626
Amount over or under (-) caps	16	31	42	65
Amount Needed to Freeze 1998 Dollar Resources				
Defense	268	270	264	267
Domestic and international	292	293	290	289
Violent crime reduction	<u>5</u>	<u>5</u>	<u>5</u>	<u>5</u>
Total	565	568	560	561
Amount over or under (-) caps	4	3	-4	1

SOURCE: Congressional Budget Office.

NOTE: Amounts needed to preserve 1998 real resources include adjustments for inflation of about 3 percent a year. Amounts needed to freeze 1998 dollar resources include no adjustment for inflation. There are no discretionary caps after 2002.

a. The estimated caps are based on those published in CBO's *Sequestration Preview Report for Fiscal Year 1999* (included as Appendix A of this volume), modified for small adjustments that by law will be made at a later date.

in dollar terms and about one-third in real terms. In 1999, complying with the outlay cap will further reduce spending by \$2 billion.

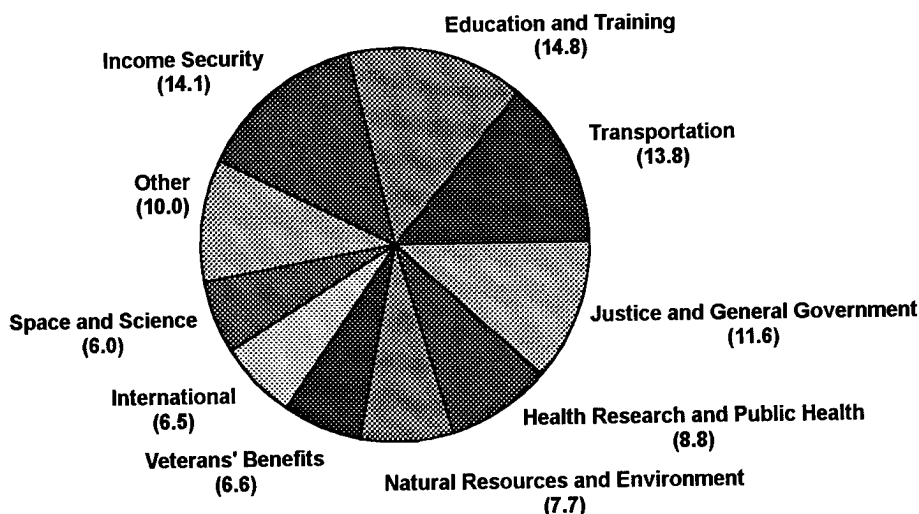
The reduction in defense spending over the past six years can be traced to two major sources: reductions in personnel and a procurement holiday that has meant postponing new weapons purchases. Attrition, early retirement, other voluntary incentives, and involuntary separations (caused by base closures, for example) have reduced the number of members of the armed services from around 2 million in 1991 to 1.4 million in 1997. Likewise, for the same reasons, civilian employment by the Department of Defense has declined from a little over 1 million six years ago to 800,000 today. The number of civilian employees is expected to drop by another 50,000 people by the end of 1999. Reductions in forces have also entailed retiring some older equipment without replacing it. Soon after the turn of the century, however, large blocks of equipment purchased during the buildup of the early 1980s will require refurbishing or replacement. Thus, the end of the procurement holiday may give way to higher defense spending in the next decade.

Nondefense Discretionary Spending

Even as defense spending generally drifted down as a share of GDP in the 1960s and 1970s, other discretionary spending climbed slowly, peaking at 5.2 percent of GDP in 1980 before its rise was reversed. Today, nondefense discretionary spending totals about 3.4 percent of GDP, slightly less than two-thirds of the 1980 peak. Approximately 25 percent of that spending goes to pay federal employees at nondefense agencies.

Nondefense discretionary spending represents 17 percent of total outlays and encompasses a broad array of federal activities (see Figure 4-2). Leading claimants of the \$288 billion in expected nondefense outlays for 1998 are education, training, and social services (\$43 billion); income security—chiefly housing subsidies—and the administrative costs of running benefit programs (\$41 billion); transportation (\$40 billion); the administration of justice, violent crime reduction, and general activities such as running the Internal Revenue Service (together, \$34 billion); health research and public health (\$25 billion); natural resources and environment (\$22 billion); veterans' benefits other than direct cash payments, chiefly medical care (\$19 billion); international programs (\$19 billion); and space and science (\$17 billion).

Figure 4-2.
Nondefense Discretionary Spending, Fiscal Year 1998 (In percent)



SOURCE: Congressional Budget Office.

In 1999, the caps on both budget authority and outlays permit a small amount of growth. Budget authority for nondefense programs can rise by nearly \$3 billion and still comply with the cap. Nondefense outlays are projected to be nearly \$6 billion greater—a 2 percent increase from the 1998 level.

Entitlements and Other Mandatory Programs

Currently, more than half of the nearly \$1.7 trillion in federal spending goes for entitlements and other mandatory programs (other than net interest). Mandatory programs make payments to recipients—usually people but sometimes businesses, not-for-profit institutions, or state and local governments—that are eligible and apply for funds. Payments are governed by formulas that are set by law and are not constrained by annual appropriation acts.

As a share of total outlays, mandatory spending has jumped from 32 percent in 1962 to 56 percent in 1997. If current policies remain unchanged, such spending will continue to grow faster than other spending, reaching 63 percent of total outlays by 2002—or twice the size of discretionary outlays. Under baseline assumptions, continued growth in mandatory outlays would raise their share of the budget to 70 percent by 2008.

The Deficit Control Act lumps mandatory programs (other than Social Security) together with receipts and subjects them to pay-as-you-go discipline; that is, liberalizations in those programs must be funded by cutbacks in other mandatory spending or by increases in taxes or fees as measured on an annual basis. (Similarly, tax cuts must be offset by tax increases or reductions in mandatory spending.) Violation of the pay-as-you-go rules will trigger a sequestration—an across-the-board cut in mandatory spending—to eliminate any increase in the deficit. Social Security has its own set of procedural safeguards, which the Congress established to prevent policy actions that would worsen the long-run condition of the trust funds.

Less than one-fourth of entitlements and mandatory spending, or approximately one-eighth of all federal spending, is means-tested—that is, paid to people who

must document their need on the basis of income or assets (and often other criteria, such as family status). The remainder of the spending has no such restrictions and is labeled non-means-tested.

Means-Tested Programs

Since the 1960s, spending on means-tested benefit programs has increased more than threefold as a share of the economy, rising from 0.8 percent of GDP in 1962 to a high of 2.6 percent in 1995. The spending pattern for those programs reflects a number of factors including new legislation, fluctuating unemployment, varying participation rates, and growth within the eligible populations. Since 1995, means-tested outlays as a share of GDP have declined slightly; however, CBO does not expect that trend to continue. Largely in anticipation that Medicaid will revert to growth rates closer to the historical record, CBO projects spending for means-tested programs that grows slightly more rapidly than the economy and reaches 2.9 percent of GDP by 2008.

Medicaid, the joint federal and state program providing medical care to many of the poor, makes up close to half of all spending for means-tested entitlements. CBO projects that federal outlays for Medicaid will grow from \$96 billion in 1997 to \$210 billion in 2008—an average annual rate of growth of 7.4 percent (see Table 4-3). Over 85 percent of Medicaid spending pays for acute and long-term care services. Those benefits are projected to climb from \$83 billion in 1997 to \$191 billion in 2008. Spending for payments to hospitals that serve a disproportionate share of Medicaid beneficiaries or other low-income people—so-called DSH payments—is projected to decline slightly between 1997 and 2003 as limits in state allotments enacted in the Balanced Budget Act constrain spending. Indeed, over the 1997-2008 period as a whole, DSH spending is expected to grow only from \$9 billion to \$10 billion. Administrative expenses account for the rest of the Medicaid program's spending, rising from \$4 billion in 1997 to \$9 billion by 2008.

The growth in Medicaid has subsided from the sky-high rates of the early 1990s. Spending for the program jumped between 20 percent and 30 percent a year from 1990 through 1992, but its growth decelerated to an average of about 10 percent from 1993 through 1995 and to just 3.3 percent in 1996 and 3.9 percent in

Table 4-3.
CBO Projections for Mandatory Spending, Including Deposit Insurance
(By fiscal year, in billions of dollars)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Means-Tested Programs												
Medicaid	96	101	108	115	123	131	141	152	165	179	194	210
Child Health Insurance	a	1	3	4	4	4	4	4	4	4	4	5
Food Stamps	23	21	22	23	25	26	27	28	29	30	31	32
Supplemental Security Income	27	27	29	30	32	33	35	37	43	42	40	46
Family Support ^b	17	19	21	21	22	23	24	24	25	25	25	25
Veterans' Pensions	3	3	3	3	3	3	4	4	4	4	4	4
Child Nutrition	8	9	9	10	10	11	11	12	12	13	14	14
Earned Income Tax Credit ^c	22	22	25	26	27	28	28	29	29	30	30	31
Student Loans	4	4	4	5	5	5	5	6	6	6	6	6
Other	4	4	5	5	5	6	6	7	7	8	8	9
Total	203	211	229	243	256	270	285	303	324	340	357	383
Non-Means-Tested Programs												
Social Security	362	376	391	409	428	449	471	495	522	551	582	614
Medicare	208	218	231	244	268	277	306	330	367	377	417	448
Subtotal	570	594	622	652	695	726	777	826	889	928	999	1,063
Other Retirement and Disability												
Federal civilian ^d	46	48	50	52	55	58	61	65	68	72	77	81
Military	30	31	32	33	34	36	37	38	39	40	41	42
Other	4	4	4	5	5	5	5	5	5	5	5	5
Subtotal	81	83	87	91	94	98	103	107	112	118	123	129
Unemployment Compensation	21	20	22	24	26	28	29	31	32	33	35	36
Deposit Insurance	-14	-5	-4	-3	-2	-2	-2	-1	-1	-1	-1	-1
Other Programs												
Veterans' benefits ^e	19	20	21	22	23	24	26	27	31	30	29	33
Farm price and income supports	6	7	6	6	5	5	5	5	5	5	5	5
Social services	5	5	5	6	6	6	6	6	6	6	6	6
Credit reform liquidating accounts	-9	-6	-5	-5	-5	-5	-6	-5	-6	-6	-6	-5
Other	14	21	19	23	23	24	24	22	22	23	23	24
Subtotal	35	47	46	51	51	53	55	55	58	58	58	63
Total	692	739	773	815	865	903	962	1,018	1,091	1,136	1,214	1,289
Total												
All Mandatory Spending	895	950	1,003	1,058	1,121	1,173	1,247	1,320	1,415	1,476	1,570	1,672

SOURCE: Congressional Budget Office.

NOTE: Spending for benefit programs shown above generally excludes administrative costs, which are discretionary. Spending for Medicare also excludes premiums, which are considered offsetting receipts.

a. The State Children's Health Insurance Program was created as part of the Balanced Budget Act of 1997.

b. Includes Temporary Assistance for Needy Families, Family Support, Aid to Families with Dependent Children, Job Opportunities and Basic Skills, Contingency Fund for State Welfare Programs, Child Care Entitlements to States, and Children's Research and Technical Assistance.

c. Includes outlays from the child credit enacted in the Taxpayer Relief Act of 1997.

d. Includes Civil Service, Foreign Service, Coast Guard, and other retirement programs, and annuitants' health benefits.

e. Includes veterans' compensation, readjustment benefits, life insurance, and housing programs.

1997. The surge in the program was fueled by several factors. The states used provider donations and taxes, as well as intergovernmental transfers, to generate federal matching funds to disproportionate share hospitals. States also shifted services that were previously funded solely at the state level into the Medicaid program. Both of those factors made states better off because they could gain access to federal matching funds without committing any new state resources. Further contributing to the growth of Medicaid in the early 1990s were federally legislated and state-initiated enrollment expansions (especially for coverage of poor children and low-income Medicare beneficiaries), the recession of 1990-1991, and higher provider payment rates.

CBO attributes the slow growth in Medicaid in 1996 and 1997—at rates that were unprecedented in the history of the program—to the combined influence of several factors. Among them are a strong economy accompanied by falling welfare caseloads, state initiatives to slow the growth in reimbursement rates for health care providers, one-time savings from enrolling more Medicaid beneficiaries in managed care, and prohibitions on state DSH payments to individual hospitals for more than 100 percent of the costs of uncompensated care.

Current projections assume that the slow rise in spending observed over the past two years will not continue and that, over the longer term, pressures for more rapid growth in benefit spending will begin to re-emerge. Factors that are likely to cause such pressures include increased utilization of certain types of services, smaller savings from moving to managed care, and the continued shifting of state services to the federal Medicaid program. (See Appendix G for additional detail on CBO's outlook for Medicaid.)

Legislation in 1997 reversed some of the changes enacted in the Personal Responsibility and Work Opportunity Reconciliation Act (also known as welfare reform) that was passed in 1996. Nevertheless, the original legislation will still affect the eligibility requirements for means-tested benefit programs such as Food Stamps, Temporary Assistance for Needy Families (TANF), and Supplemental Security Income (SSI). Outlays for the Food Stamp program are expected to continue their recent decline in 1998, bottoming out at \$21 billion before slowly rising in 1999. They grow moderately thereafter, nearing \$32 billion in 2008 (see

Table 4-3). Projected spending in TANF and related family support programs gradually rebounds from the unexpectedly low levels experienced in 1997 to expand slowly, reaching \$25 billion in 2008. SSI benefits, with the restoration of eligibility to certain aliens and the announcement by the Clinton Administration that it will reexamine many cases in which benefits for disabled children were terminated, are projected to escalate from \$27 billion in 1998 to \$46 billion in 2008. Combining the earned income credit with the newly enacted child tax credit, outlays from the refundable tax credits are expected to grow from \$22 billion in 1998 to \$31 billion in 2008.

One set of programs that is not so easily characterized as means-tested is student loans. Currently, the majority of loans are subsidized and limited to students from families with lower incomes and financial assets. However, the fastest-growing category of loans is for students from middle- and upper-income families whose current income is insufficient to finance college costs. In 1998, the programs expect to disburse nearly \$30 billion in loans guaranteed or provided directly by the federal government. More than \$430 billion in loans are projected for disbursement over the 1998-2008 period. Of that total, the percentage of unsubsidized loans is projected to increase from 35 percent in 1998 to 41 percent in 2008.

Despite the magnitude of the funds involved, the costs reflected in the federal budget for student loans are only a small portion of the disbursements. Under the Federal Credit Reform Act, only the subsidy costs of the loans are treated as outlays. Those outlays are estimated as the future costs in today's dollars of in-school interest subsidies, default costs, and other expected costs over the life of the loans. (Box 2-1 on page 38 provides a more detailed discussion that addresses the estimated costs of the caps on interest rates paid by students.) CBO estimates that the subsidy costs of the loans will range from \$4 billion to \$6 billion annually over the projection period.

Non-Means-Tested Programs

Social Security, Medicare, and other retirement and disability programs dominate non-means-tested entitlements. Social Security is the largest federal program by

far, with expected expenditures of \$376 billion in 1998. Most Social Security beneficiaries—whose numbers currently total slightly more than 44 million and are projected to grow to almost 52 million in 2008—also participate in Medicare, which is expected to cost \$218 billion in 1998. Together, those two programs account for more than one out of every three dollars spent by the federal government, up from about one in four dollars in 1980.

Over the past decade, Medicare grew by an average of 10 percent a year compared with Social Security's 6 percent; during the next decade, Medicare is projected to grow by an average of around 7.5 percent a year and Social Security by 5 percent. The share of the economy devoted to Social Security will remain fairly constant over that period—increasing only from 4.5 percent of GDP to 4.7 percent. However, CBO expects that Medicare's share will rise by close to a full percentage point, from 2.6 percent to 3.4 percent of GDP. The increases in the two programs combined are projected to result in nearly \$500 billion a year in additional annual spending by 2008—even before the surge in baby-boomer retirements that is expected to begin shortly thereafter. (For a more comprehensive look at CBO's Medicare projections, see Appendix F.)

Other retirement and disability programs, totaling \$83 billion in 1998, are less than one-fourth the size of Social Security. They are dominated by benefits for the federal government's civilian and military retirees and Railroad Retirement and are expected to grow slightly faster than inflation.

Spending for both unemployment compensation and deposit insurance has declined from the crests reached in the early 1990s. Outlays for unemployment compensation peaked at \$37 billion in 1992, but low unemployment rates stemming from the growing economy have brought them down to nearly half that amount. As the economy slows and unemployment rates rise, spending for unemployment compensation is projected to creep up. Outlays for deposit insurance reached their pinnacle of \$66 billion in 1991; these days, though, the funds are collecting more from the sale of acquired assets and the interest on fund balances than they are spending to resolve failed banks and thrift institutions.

The category of other non-means-tested entitlements encompasses a diverse set of programs, mainly farm price supports, most veterans' benefits, certain social service grants to the states, and the Universal Service Fund. In 1998, that spending is projected to total \$47 billion, up from \$35 billion in 1997. Feeding that increase are a \$3 billion charge that reflects an anticipated shortfall in receipts from previous auctions of licenses to use portions of the electromagnetic spectrum, \$1.5 billion in new outlays from the Universal Service Fund (a fund designed to ensure universal access to telecommunications services whose spending is completely offset by the revenues it receives), and an estimated increase of \$1 billion in net expenditures attributed to the Postal Service.

Additionally, CBO continues to assume that annual outlays of \$1.5 billion will be required for six years beginning in 1998 for federal payments to certain savings and loan institutions. The payments are the outcome of court decisions that found that the government had breached existing contracts with those thrifts. In the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), the government rescinded the permission to use goodwill as a capital asset, which federal regulators had granted to thrifts to induce them to purchase failing institutions. In 1996, the Supreme Court ruled that the action taken in FIRREA constituted a breach of contract.

Those payments to the thrifts are expected to be resolved by 2003, but over time, total outlays for the category of other non-means-tested entitlements are expected to rise to \$63 billion. The primary contributors to that upswing are continued increases in outlays from the Universal Service Fund and greater demands for compensation from the Department of Veterans Affairs in the area of smoking-related illnesses.

Why Does Mandatory Spending Increase?

Spending for entitlements and other mandatory programs as a whole has doubled since 1985, rising faster than both nominal growth in the economy and the rate of inflation. CBO's baseline projections anticipate a continuation of those trends.

Why does mandatory spending grow so fast? One convenient way of analyzing such growth is to break it down by its major causes. The analysis shows that rising caseloads, automatic increases in benefits, and greater utilization of medical services will account for more than 85 percent of the growth in entitlements and other mandatory programs between 1997 and 2007.

Mounting caseloads account for only about one-fifth of the growth in entitlement programs. Compared with this year's outlays, spending will increase as a result of higher caseloads by \$11 billion in 1999 and \$159 billion in 2008 (see Table 4-4). The majority of that growth is concentrated in the Social Security and

Medicare programs and is traceable to continued expansion of the population of elderly and disabled people. Much of the rest is in Medicaid. Among those three programs, the growth in caseloads alone boosts outlays by at least 15 percent apiece during the 1999-2008 period.

Not all programs have had continually increasing caseloads, however. Recent trends in programs such as Food Stamps, TANF, and unemployment insurance have shown caseloads diminishing over the past couple of years. CBO does not expect those declines to continue. (See Box 4-1 for a discussion of patterns in caseload levels.)

Table 4-4.
Sources of Growth in Mandatory Spending (By fiscal year, in billions of dollars)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Estimated Spending for Base Year 1998	950	950	950	950	950	950	950	950	950	950
Sources of Growth										
Increases in caseloads	11	24	37	50	65	80	98	116	137	159
Automatic increases in benefits										
Cost-of-living adjustments	9	22	37	52	68	84	101	118	136	154
Other ^a	4	9	16	23	35	47	60	73	88	103
Other increases in benefits										
Increases in Medicare and Medicaid ^b	16	28	45	64	82	104	127	151	176	202
Growth in Social Security ^c	5	8	11	16	20	26	33	41	50	60
Irregular number of benefit payments ^d	0	0	5	-5	0	0	15	-9	-6	0
Change in outlays for deposit insurance	1	2	3	3	4	4	4	4	4	4
Other sources of growth	7	15	16	19	23	25	28	31	36	41
Total	53	108	171	223	297	370	465	526	620	723
Projected Spending	1,003	1,058	1,121	1,173	1,247	1,320	1,415	1,476	1,570	1,672

SOURCE: Congressional Budget Office.

- Automatic increases in food stamp and child nutrition benefits, certain Medicare reimbursement rates, and the earned income tax credit under formulas specified by law.
- All growth not attributed to caseloads and automatic increases in reimbursement rates.
- All growth not attributed to caseloads and cost-of-living adjustments.
- Represents baseline differences attributable to variations in the number of benefit checks that will be issued in a fiscal year. Normally, benefit payments are made once a month. However, Medicare will pay 13 months of benefits in 2001 and 2005 and 11 in 2002 and 2006. Supplemental Security Income and veterans' benefits will be paid 13 times in 2005, 12 times in 2006, and 11 times in 2007.

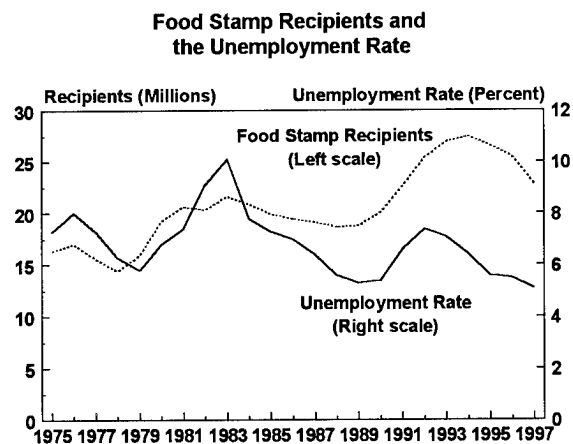
Box 4-1. Changes in Caseloads for Means-Tested Programs

The number of participants, along with average benefit levels, is a basic determinant of an entitlement program's costs. For means-tested programs, such as Food Stamps or Family Support, caseload size often depends on how well the overall economy is performing. In times of economic growth, one would expect a drop in caseloads, whereas during a recession, caseloads would be expected to rise.

In recent years, however, the historical relationships between participation and such factors as unemployment rates and demographic patterns have proved inadequate for projecting caseloads in means-tested entitlements. In the 1989-1992 period, CBO's models underestimated the increase in program participation as the unemployment rate was rising. When the unemployment rate declined during 1993 and 1994, caseloads, strangely, continued to grow. Yet by 1995, when unemployment rates fell below the 6 percent level, caseloads were dropping faster than prior observations would have suggested. Caseloads in the Food Stamp and Family Support programs have continued to fall at a rapid pace over the past two years, and that descent is not easily explained by changes in the unemployment rate or other variables in the CBO models.

The Food Stamp program can serve as a case study in forecasting caseloads. The program is the one entitlement for low-income individuals and families that is closest to being universal. Unlike Supplemental Security Income and the old Aid to Families with Dependent Children, for which family status or individual nonfinancial characteristics are or were eligibility requirements, Food Stamp benefits are available to many low-income, nondisabled individuals as well as to all low-income families. As such, one might expect that fluctuations in caseloads would be strongly influenced by general economic conditions—particularly the unemployment rate.

Indeed, as the figure below illustrates, until recently the general relationship between the overall unemployment rate and Food Stamp participation has been relatively stable.



SOURCE: Congressional Budget Office.

Based on the period before 1990, an increase in the unemployment rate of 1 percentage point resulted in an increase in food stamp recipients of nearly 4 percent, which in 1990 would have been about 700,000 participants. However, between 1990 and 1992, the overall unemployment rate rose by nearly 2 percentage points, whereas the number of food stamp recipients increased by nearly 5 million, or 20 percent. Similarly, between 1995 and 1997, when the average national unemployment rate dropped from 5.6 percent to 5.1 percent, the number of food stamp recipients fell by nearly 3.6 million, or 14 percent.

Why caseloads in the program have declined so fast since 1995 is still something of a mystery. Some observers would point to the passage of welfare reform in 1996 as an explanation, but that answer is unsatisfactory. Caseloads were falling more rapidly than the historical record would have anticipated before the legislation was enacted. Moreover, most of the provisions that would have removed beneficiaries from the rolls were not effective until late in fiscal year 1997. The legislation, which CBO estimates eventually removed 1.5 million recipients from the Food Stamp rolls, would have accounted for less than one-fifth—about 700,000—of the reduction of 3.6 million recipients that occurred in the average monthly caseload in 1997. The total remaining caseload reduction of 2.9 million cannot be explained by the 0.5 percentage-point decrease in the unemployment rate. An alternative explanation is that the welfare reform debate of 1995 and 1996 and the enactment of welfare reform heightened the stigma effect of receiving welfare payments, and as a result, fewer people from among the eligible population elected to receive benefits. The problem with that explanation is that the effect is difficult to quantify. Also problematic is determining whether the trend will continue and at what point the effect will stabilize. That judgment is further complicated by the ongoing evolution of state plans with new time limitations for Temporary Assistance for Needy Families (TANF) and the enhanced work requirements in both the TANF and Food Stamp entitlements.

CBO expects that the decline in the number of food stamp recipients will end late in 1998 and that caseloads will begin to grow by the end of the year as the unemployment rate begins to rise. After two years of averaging just over 20 million—about the same level as in 1990—the caseload is projected to reach 21 million in 2000 and eventually climb to 23.5 million in 2008. The actual pattern of participation could prove significantly different, however. CBO assumes that the sensitivity of caseloads to unemployment rates will revert to a relationship that is closer to the pre-1990 experience than to the correlations observed in the 1990s. If slowly rising unemployment rates engender the caseload response seen in the last recession, Food Stamp spending will be significantly higher than in current projections. In contrast, a continuation of the unexplained factors that have recently dampened Food Stamp participation could mean that CBO's projected outlays will be too high.

Automatic increases in benefits account for more than one-third of the growth in entitlement programs. All of the major retirement programs grant automatic cost-of-living adjustments (COLAs) to their beneficiaries. Those adjustments, which are pegged to the consumer price index, are expected to rise to 2.8 percent a year by 2001 and remain at that level thereafter. In 1998, outlays for programs with COLAs are about \$500 billion, and COLAs are projected to add an extra \$9 billion in 1999 and \$154 billion in 2008.

Several other programs—chiefly the earned income tax credit (EITC), Food Stamps, and Medicare—are also automatically indexed to changes in prices. The income thresholds above which the EITC begins to be phased out are automatically adjusted for inflation using the consumer price index (the EITC is administered through the personal income tax but is recorded as an outlay in the budget). The Food Stamp program makes annual adjustments to its benefit payments according to changes in the Department of Agriculture's Thrifty Food Plan index. Medicare's payments to providers are based in part on special price indexes for the medical sector. The combined effect of indexing for those programs contributes an extra \$4 billion in outlays in 1999 and \$103 billion in 2008.

The remaining 40 percent to 50 percent of the boost in entitlement spending comes from increases that cannot be attributed to rising caseloads or automatic adjustments in reimbursements. Two sources of growth are expected to become even more important over time. First, Medicaid spending grows with inflation, even though it is not formally indexed. Medicaid payments to providers are determined by the states, and the federal government matches those payments. If states increase their benefits to account for inflationary growth, federal payments will rise correspondingly. Second, the health programs have faced steadily escalating costs per participant beyond the effects of inflation; that trend, which is often termed an increase in "intensity," reflects the consumption of more services per participant and the growing use of more costly procedures. The residual growth in Medicare and Medicaid from both of those sources amounts to \$16 billion in 1999 and \$202 billion in 2008.

In most retirement programs, the average benefit grows faster than the COLA alone would explain.

Social Security is a prime example. Because new retirees have recent earnings that were bolstered by real wage growth, their benefits generally exceed the monthly check of a long-time retiree who last earned a salary a decade or two ago and who has been receiving only cost-of-living adjustments since then. And because more women are working, more new retirees receive benefits based on their own earnings rather than a smaller, spouse's benefit. In Social Security alone, such phenomena are estimated to add \$5 billion in outlays in 1999 and \$60 billion in 2008.

Depending on calendar flukes, Supplemental Security Income, veterans' compensation and pensions, and Medicare (payments to health maintenance organizations only) may pay 11, 12, or 13 monthly checks in a fiscal year. (See Chapter 2 for an explanation of shifts in the timing of payments.) Most of the remaining growth in spending for benefit programs derives from the following: rising benefits for new retirees in the Civil Service, Military, and Railroad Retirement programs (fundamentally the same phenomenon as in Social Security); larger average benefits in unemployment compensation, a program that lacks an explicit COLA provision but pays amounts that are automatically linked to the recent earnings of its beneficiaries; a reduction in net income to bank and thrift insurance funds; and other sources. All of those factors together, however, contribute just \$45 billion of the total \$723 billion increase in mandatory spending from 1998 to 2008.

Program Continuations Assumed in the Baseline

The general baseline concept for mandatory programs is that budget authority and outlays are projected in accordance with current law. However, in the case of programs with outlays of more than \$50 million in the current year, the Deficit Control Act directs CBO to assume that the programs continue when their authorization expires. The bulk of projected spending associated with assumed program extensions occurs after 2002, when the current authorizations for the Food Stamp and TANF programs expire. (See Table 4-5 for the budget authority and outlays associated with the continuation of expiring programs.)

Table 4-5.
Program Continuations Assumed in the CBO Baseline (By fiscal year, in billions of dollars)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Transportation Programs Controlled by Obligation Limitations ^a											
Budget authority	n.a.	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9	30.9
Outlays	n.a.	0	0	0	0	0	0	0	0	0	0
Transportation Programs Not Subject to Annual Obligation Limitations											
Budget authority	n.a.	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Outlays	n.a.	0.1	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Family Preservation and Support											
Budget authority	n.a.	n.a.	n.a.	n.a.	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Outlays	n.a.	n.a.	n.a.	n.a.	0.1	0.3	0.3	0.3	0.3	0.3	0.3
Rehabilitation Services and Disability Research											
Budget authority	n.a.	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.3
Outlays	n.a.	1.8	2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.2	3.3
Food Stamps											
Budget authority	n.a.	n.a.	n.a.	n.a.	n.a.	26.8	27.8	28.7	29.7	30.7	31.8
Outlays	n.a.	n.a.	n.a.	n.a.	n.a.	26.3	27.8	28.7	29.7	30.7	31.8
Child Nutrition											
Budget authority	n.a.	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7
Outlays	n.a.	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7
Contingency Fund for State Welfare Programs ^b											
Budget authority	n.a.	n.a.	n.a.	n.a.	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Outlays	n.a.	n.a.	n.a.	n.a.	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Child Care Entitlements to States											
Budget authority	n.a.	n.a.	n.a.	n.a.	n.a.	2.7	2.7	2.7	2.7	2.7	2.7
Outlays	n.a.	n.a.	n.a.	n.a.	n.a.	2.4	2.8	2.8	2.7	2.7	2.7
Temporary Assistance for Needy Families											
Budget authority	n.a.	n.a.	n.a.	n.a.	n.a.	16.7	16.8	16.8	16.8	16.8	16.8
Outlays	n.a.	n.a.	n.a.	n.a.	n.a.	17.3	17.5	17.7	17.8	17.8	17.8
Veterans' Compensation											
Budget authority	0.3	0.7	1.1	1.6	2.0	2.5	3.0	3.8	4.1	4.2	5.1
Outlays	0.3	0.7	1.1	1.5	2.0	2.5	3.0	3.8	4.0	4.2	5.1
Judiciary Information Technology Fund											
Budget authority	-0.1	c	0	c	c	0	0	0	0	0	0
Outlays	c	c	0	c	c	0	0	0	0	0	0
Total											
Budget authority	0.2	35.2	35.7	36.3	37.4	84.2	85.9	87.7	89.1	90.3	92.4
Outlays	0.3	2.9	4.4	5.1	6.1	52.9	55.8	57.7	59.1	60.4	62.4

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

- Authorizing legislation provides contract authority, which is counted as mandatory budget authority. However, because spending is subject to obligation limitations specified in annual appropriation acts, outlays are considered discretionary.
- Supplements the Temporary Assistance for Needy Families block grant by providing matching amounts to states that reach certain unemployment or Food Stamp thresholds and maintain 100 percent of historical state spending on block-grant programs.
- Less than \$50 million.

Offsetting Receipts

Offsetting receipts are income that the government records as negative spending. Those receipts are either intragovernmental (reflecting payments from one part of the federal government to another) or proprietary (reflecting payments from the public in exchange for goods or services).

A decision to collect more (or less) money in the form of offsetting receipts usually requires a change in the laws generating such collections. Thus, offsetting receipts resemble mandatory spending and revenues, which are also subject to pay-as-you-go discipline, rather than discretionary appropriations.

Intrabudgetary transfers that represent the contributions agencies make to their employees' retirement plan account for more than 40 percent of offsetting receipts, a share that is expected to remain relatively constant through 2008 (see Table 4-6). Agency contributions are paid primarily to the trust funds for Social Security, Hospital Insurance, Military Retirement, and Civil Service Retirement. Some contribution rates are set by statute; others are determined by actuaries. The contributions that agencies are required to make for their employees are charged against their budgets in the same way that other elements of their employees' compensation are charged. Future retirement benefits are an important part of the compensation package for the government's 4.3 million civilian, military, and postal employees. The budget treats those contributions as

Table 4-6.
CBO Projections of Offsetting Receipts (By fiscal year, in billions of dollars)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Employer Share of Employee Retirement												
Social Security	-6	-7	-8	-8	-9	-10	-10	-11	-12	-13	-14	-15
Military Retirement	-11	-10	-11	-11	-11	-11	-12	-12	-12	-13	-13	-13
Other ^a	-17	-17	-17	-18	-19	-20	-20	-21	-22	-23	-24	-25
Subtotal	-34	-35	-36	-37	-39	-41	-42	-44	-46	-48	-50	-53
Medicare Premiums	-20	-21	-23	-25	-28	-31	-35	-38	-42	-46	-51	-55
Energy-Related Receipts ^b	-7	-6	-5	-5	-5	-6	-5	-5	-5	-5	-5	-5
Natural Resource-Related Receipts ^c	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
Electromagnetic Spectrum Auctions	-11	-2	-3	-4	-5	-12	-1	-1	-1	-1	-1	d
Other ^e	-11	-14	-11	-10	-10	-12	-11	-9	-9	-9	-9	-9
Total	-86	-81	-81	-84	-90	-104	-96	-100	-106	-112	-119	-126

SOURCE: Congressional Budget Office.

- Primarily received by Civil Service Retirement.
- Includes proceeds from the sale of power, various fees, and naval petroleum reserve and Outer Continental Shelf receipts.
- Includes timber and mineral receipts and various fees.
- Less than \$500 million.
- Includes asset sales.

outlays and handles the deposits made in retirement funds as offsetting receipts. The transfers thus wash out in the budgetary totals, leaving only the funds' disbursements—for retirement benefits and administrative costs—reflected in total outlays.

The largest proprietary receipt that the government collects is made up of premiums from the 37 million people who enroll in Supplementary Medical Insurance (SMI, or Part B of Medicare), which primarily covers physician and outpatient hospital services. Premium collections from the elderly and disabled are estimated to grow from \$21 billion in 1998 to \$55 billion in 2008, as the monthly charge climbs from \$43.80 to \$105.70. Premiums are set to cover one-quarter of the costs of SMI.

Other proprietary receipts come mostly from charges for energy, minerals, and timber and from various fees levied on users of government property or ser-

vices. Continued auctions by the Federal Communications Commission of portions of the electromagnetic spectrum for use by telecommunications companies are expected to bring in from \$2 billion to \$5 billion each year through 2001. In 2002, receipts from the auctions are projected to rise to \$12 billion, after which they will diminish.

Net Interest

Interest costs are a significant portion of the federal budget, currently representing 15 percent of all federal outlays. Under CBO's assumptions of stable interest rates throughout the projection period and rising surpluses after 2001, the outstanding debt is projected to decline, and in turn, interest payments will drop to 8

Table 4-7.
CBO Projections of Federal Interest Outlays (By fiscal year, in billions of dollars)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Interest on Public Debt (Gross interest) ^a	356	365	374	379	382	385	390	396	402	408	414	419
Interest Received by Trust Funds												
Social Security	-41	-46	-53	-59	-65	-72	-79	-87	-96	-105	-115	-126
Other trust funds ^b	-64	-67	-67	-69	-71	-73	-76	-78	-81	-83	-86	-88
Subtotal	-105	-113	-119	-128	-137	-145	-155	-166	-177	-189	-201	-214
Other Interest ^c	-7	-8	-7	-7	-8	-8	-9	-9	-10	-10	-10	-11
Total	244	244	248	244	238	231	226	222	216	209	202	194

SOURCE: Congressional Budget Office.

NOTE: Projections of interest assume that discretionary spending will equal the statutory caps that are in effect through 2002 and will grow at the rate of inflation in succeeding years.

a. Excludes interest costs of debt issued by agencies other than the Treasury (primarily the Tennessee Valley Authority).

b. Principally Civil Service Retirement, Military Retirement, Medicare, unemployment insurance, and the Highway and the Airport and Airway Trust Funds.

c. Primarily interest on loans to the public.

percent of the budget by 2008. In dollar terms, net interest will fall from \$244 billion in 1997 to an expected level of \$194 billion in 2008 (see Table 4-7). Debt held by the public will shrink during that period from \$3.8 trillion to \$3.3 trillion, provided the projected surpluses are realized. As a percentage of GDP, interest costs are projected to decline slowly from 2.9 percent this year to 1.5 percent in 2008. Debt held by the public will drop to about 25 percent of GDP.

In general, interest costs are not covered by the enforcement provisions of the Deficit Control Act because they are not directly controllable. Rather, interest depends on the amount of outstanding government debt and on interest rates. The Congress and the President influence the former by making decisions about taxes and spending and thus about borrowing. Beyond that, they exert no direct control over interest rates, which are determined by market forces and Federal Reserve policy.

Interest rates have a powerful effect on budget projections (see Appendix C). If interest rates are 1 percentage point higher than CBO assumes in the period from 1998 through 2008, net interest costs will be greater by about \$5 billion in 1998 and \$48 billion in 2008. The extra costs stem from additional financing requirements and the rollover of existing debt by the Treasury.

Net or Gross?

Net interest is the most useful measure of the government's current debt-service costs. Some budget-watchers stress gross interest (and its counterpart, the gross federal debt) instead of net interest (and its counterpart, debt held by the public). But that choice exaggerates the government's debt-service burden because it overlooks billions of dollars in interest income that the government receives.

The government has sold almost \$3.8 trillion worth of securities to finance deficits over the years. But it

has also issued securities to its own trust funds in the amount of \$1.6 trillion (mainly to Social Security and the other retirement funds). Those securities represent the past surpluses of the trust funds, and their total amount grows approximately in step with the projected trust fund surpluses (see Chapter 2). The funds redeem the securities as needed to pay benefits; in the meantime, the government both pays and collects the interest on those securities. It also receives interest income from loans and cash balances. Broadly speaking, gross interest encompasses all interest paid by the government (even to its own funds) and ignores all interest income. Net interest, by contrast, is the net flow to people and organizations outside the federal government.

Net interest is only about two-thirds as large as gross interest. CBO estimates that the government will pay \$365 billion in gross interest costs this year. Of that amount, however, \$113 billion is simply credited to trust funds and does not leave the government or add to the total deficit. The government is also projected to collect nearly \$8 billion in other interest income in 1998. Net interest costs this year therefore total \$244 billion.

Other Interest

The \$8 billion in other interest noted above comprises some interest payments and some interest collections. On balance, however, the government receives more in interest in this category than it pays out. Among the expenditures are Treasury payments for interest on individual, corporate, and excise tax refunds that are held up for more than 45 days after the filing date (those payments total approximately \$3 billion annually). An example of other collections is the interest received from the financing accounts of direct loan programs. As those programs (student loans, for instance) make more loans, they borrow money from and pay interest to the Treasury. The total of all interest payments for direct loan programs is expected to rise from \$5 billion in 1998 to \$16 billion in 2008, mostly because of the growth of the direct student loan program.

Appendixes

Sequestration Preview Report for Fiscal Year 1999

The Congressional Budget Office (CBO) estimates that the statutory limits on discretionary spending detailed in this sequestration report would allow the Congress and the President to increase appropriations slightly for 1999—although by less than the expected rate of inflation. For mandatory spending and revenues, the modest pay-as-you-go balance that is available in 1998 would allow a small increase in mandatory spending or reduction in revenues without triggering a sequestration.

Discretionary Sequestration Report

The Balanced Budget and Emergency Deficit Control Act of 1985 (the Deficit Control Act), as amended, sets limits on discretionary spending and provides for across-the-board cuts—known as sequestration—if annual appropriations exceed those limits. The caps are in effect through fiscal year 2002. Separate limits apply to budget authority and outlays.

For fiscal years 1998 and 1999, the law splits discretionary spending into three categories: defense, nondefense, and spending to reduce violent crime. For fiscal year 2000, it combines defense and nondefense spending into a single discretionary category, while retaining the violent crime reduction category. For fiscal years 2001 and 2002, the law folds all

three types of spending into one discretionary category, so the limits apply to total discretionary spending. (The joint explanatory statement that accompanies the conference report on the Balanced Budget Act of 1997 specifies which category each appropriation account falls into.) By law, the discretionary spending limits can be adjusted each year to account for such things as the enactment of emergency appropriations and changes in budgetary concepts and definitions.

The Office of Management and Budget (OMB) estimates whether a sequestration is required to eliminate a breach of the discretionary spending limits. (CBO's estimates are merely advisory.) As a result, CBO used the estimated limits in OMB's most recent sequestration report—the final sequestration report for fiscal year 1998, published in November—as the starting point for the adjustments it is required to make in this sequestration preview report for fiscal year 1999.

Technical Differences Between the Limits in CBO's and OMB's Final Reports

The estimated discretionary spending limits in CBO's final sequestration report for 1998 differed only slightly from those OMB published a few days later in its final report. For the defense category, CBO's and OMB's estimates of the limits for both budget authority and outlays were identical.

CBO's estimate of the nondefense budget authority limit for 1998 was \$307 million higher than OMB's (see Table A-1). That occurred solely because CBO's report included \$307 million in contingent emergency appropriations—primarily \$300 million for the

Low Income Home Energy Assistance Program—that the President had not yet released. (As a rule, CBO's estimates include such appropriations, since no further action by the Congress is necessary to make the funds available. OMB, however, only includes contingent

Table A-1.
CBO Estimates of Discretionary Spending Limits for Fiscal Years 1998-2002 (In millions of dollars)

	1998		1999		2000		2001		2002	
	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays
Total Discretionary Spending Limits in CBO's November Final Report	528,307	556,478	532,999	561,372	537,193	565,093	542,032	564,565	551,074	560,877
Defense Discretionary Category^a										
Spending limits in CBO's November final report	269,000	267,124	271,500	266,566	*	*	*	*	*	*
Adjustment (Changes in appropriated spending contained in authorizing legislation)	0	0	2	2	*	*	*	*	*	*
Spending limits as of January 16, 1998	269,000	267,124	271,502	266,568	*	*	*	*	*	*
Nondefense Discretionary Category^a										
Spending limits in CBO's November final report	253,807	285,762	255,699	289,853	*	*	*	*	*	*
Adjustments										
Technical differences from OMB's November final report	-307	-82	0	-175	*	*	*	*	*	*
Contingent emergency appropriations designated since OMB's November final report	6	6	0	0	*	*	*	*	*	*
Changes in mandatory spending contained in appropriation acts	*	*	-19	7	*	*	*	*	*	*
Changes in appropriated spending contained in authorizing legislation	*	*	24	-91	*	*	*	*	*	*
Spending limits as of January 16, 1998	253,506	285,686	255,704	289,594	*	*	*	*	*	*

(Continued)

emergency appropriations actually released by the President.) Differences in the nondefense outlay caps stem from CBO's inclusion of that \$307 million, as well as from differences in the estimated rates of spending for appropriations to pay for continuing disability reviews,

U.S. arrearages to international organizations, and initiatives to ensure compliance with the earned income tax credit—all of which required adjustments to the spending caps in the final sequestration report.

Table A-1.
Continued

	1998		1999		2000		2001		2002	
	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays
Violent Crime Reduction Category ^a										
Spending limits in CBO's November final report	5,500	3,592	5,800	4,953	4,500	5,554	*	*	*	*
Adjustment (Technical differences from OMB's November final report)	0	1,241	0	0	0	0	*	*	*	*
Spending limits as of January 16, 1998	5,500	4,833	5,800	4,953	4,500	5,554	*	*	*	*
Overall Discretionary Category ^c										
Spending limits in CBO's November report	*	*	*	*	532,693	559,539	542,032	564,565	551,074	560,877
Adjustments										
Technical differences from OMB's November final report	*	*	*	*	0	-1	0	0	0	2
Changes in mandatory spending contained in appropriation acts	*	*	*	*	-40	-60	-47	-50	-54	-54
Changes in appropriated spending contained in authorizing legislation	*	*	*	*	3	-238	4	-317	3	-347
Spending limits as of January 16, 1998	*	*	*	*	532,656	559,240	541,989	564,198	551,023	560,478
Total Discretionary Spending Limits as of January 16, 1998	528,006	557,643	533,006	561,115	537,156	564,794	541,989	564,198	551,023	560,478

SOURCE: Congressional Budget Office.

NOTES: The limits shown in this report do not reflect any adjustment for items canceled by the President under the Line Item Veto Act. CBO will adjust the limits to account for those cancellations in later sequestration reports after the time for the Congress to enact disapproval bills has elapsed.

* = not applicable; OMB = Office of Management and Budget.

a. This category is folded into the overall discretionary category after fiscal year 1999.

b. This category is folded into the overall discretionary category after fiscal year 2000.

c. This category comprises defense and nondefense spending in fiscal year 2000, plus violent crime reduction spending in 2001 and 2002.

For the violent crime reduction category, CBO and OMB made identical estimates of the budget authority limits but differed on the 1998 outlay limit. The large discrepancy in that limit results from OMB's use of the special outlay allowance to reconcile differences between the two agencies' estimates of how quickly appropriations for violent crime reduction will be spent.

Emergency Funding Made Available Since OMB's Final Report

As required by law, CBO adjusts the discretionary spending limits to reflect emergency appropriations made available since the previous sequestration report. Since the release of OMB's final report in November, no new emergency appropriations have been enacted. However, the President did release \$6 million in contingent emergency spending to indemnify farmers and ranchers for livestock losses resulting from natural disasters. That amount is reflected in the nondefense spending limits for 1998 shown in Table A-1. CBO must include that adjustment because it adopts OMB's estimates as its starting point, and OMB's estimates do not include the effects of contingent emergency appropriations until they are released by the President.

Changes in Concepts and Definitions

The Deficit Control Act allows the discretionary caps to be adjusted to take account of changes in budgetary concepts and definitions. Those adjustments generally reflect reclassifications of spending from one budget category to another, such as from discretionary to mandatory, or vice versa.

The Congressional budget committees and OMB have determined that effects beyond the budget year of certain legislation should be reflected in the discretionary spending limits. When changes in mandatory spending are made in an appropriation act, the effect in the current year or budget year is included in the cost estimate of the act, and the future effect is reflected as an adjustment to the discretionary caps. For example, an appropriation act containing a provision that decreases mandatory spending will be credited with the savings from that provision for the budget year; savings for future years will be reflected as increases in the discretionary caps. When changes in discretionary spend-

ing result from a provision in authorizing legislation, they are shown on the pay-as-you-go scorecard for all years, with a corresponding adjustment to the discretionary caps in future sessions of Congress. For example, if authorizing legislation contains advance appropriations, their effect will be included as part of the cost of the legislation, and the discretionary spending limits will be increased to accommodate the appropriations themselves.

The appropriation acts for fiscal year 1998 contained various changes that affect mandatory spending. They require a net decrease of \$19 million in the 1999 nondefense budget authority limit and a net increase of \$7 million in the nondefense outlay limit (see Table A-1). After 1999, they require net reductions of roughly \$50 million a year in both the budget authority and outlay limits for the overall discretionary category. Among the largest changes to mandatory spending contained in appropriation acts are a delay in carrying out certain policies of the 1996 welfare reform law regarding refugees (which was included in the foreign operations appropriation act), a freeze in the Export Enhancement Program (included in the Agriculture Department's appropriation act), and an increase in the spending of revenues from existing recreation fees (included in the Interior Department's appropriation act).

The adjustments for mandatory spending do not reflect a provision that the President canceled using the authority granted in the Line Item Veto Act. (The provision relates to the conveyance of lands in Montana.) CBO is not yet adjusting the caps to reflect the President's cancellation because the Line Item Veto Act gives the Congress an opportunity to enact a disapproval bill to override the cancellation, and the time allowed for enacting that bill has not yet elapsed.

The last type of adjustment—for changes in appropriated spending contained in legislation other than appropriation acts—on balance requires net increases in the budget authority limits and net decreases in the outlay limits in every year after 1998. For the defense category, the cap adjustment is an increase of \$2 million for both budget authority and outlays in 1999, with a spillover of similar magnitude into the overall discretionary category after that. For nondefense spending, the net adjustment is a \$24 million increase in the budget authority limit for 1999 and a \$91 million decrease in the outlay limit (see Table A-1).

The largest adjustment for appropriated spending by other committees reflects changes to the Department of Housing and Urban Development's appropriations for contributions to assisted housing. The Balanced Budget Act of 1997 increased rents for certain housing units after 1998, reducing the need for appropriations for rent subsidies. That change requires a reduction in the outlay limit for every year after 1998, but it has no effect on the budget authority limits. Most of the rise in the budget authority limits results from the act reauthorizing the Small Business Administration, which included a \$22 million appropriation for the business loan program account for 1999.

How the 1999 Caps Compare with Projected Discretionary Spending

The 1999 limits on defense and nondefense discretionary spending shown in Table A-1 constrain CBO's baseline projection of budget authority and outlays. If there were no caps, the baseline concept would call for calculating 1999 budget authority by adjusting enacted 1998 appropriations to account for the effects of inflation. That procedure, however, yields budget authority that is almost \$5.9 billion higher than the 1999 cap for the defense category and \$10.3 billion higher for the nondefense category. Likewise, if 1999 appropriations equaled 1998 budget authority adjusted for inflation, total outlays (including those from previously enacted appropriations) would exceed the cap on defense outlays by \$8.2 billion and the cap on nondefense outlays by almost the same amount.

Since the limits on budget authority for 1999 are not large enough to provide the same real (inflation-adjusted) level of defense or nondefense spending as in 1998, the Congress will need to increase 1999 appropriations by less than the rate of inflation to stay within the budget authority limits. Further, if the mix of such spending does not change, the defense and nondefense outlay caps would be constraining even if lawmakers held 1999 appropriations to the 1998 level with no increase for inflation. That result stems from differing assumptions about spending rates and the composition of 1998 appropriations between CBO's baseline and the Balanced Budget Act, which established the current caps. If spending for every program was frozen, the special outlay allowance available under section 251(b)(2)(B) of the Deficit Control Act would cover the excess over the caps. But that allowance might not

prove sufficient—particularly for the nondefense category—if the programmatic mix was changed to provide relatively more funding for programs that spend appropriations rapidly.

Pay-As-You-Go Sequestration Report

The Deficit Control Act, as amended, also contains a mechanism to ensure that any legislative changes in direct spending or receipts enacted since the Balanced Budget Act and before 2003 do not increase the deficit. That mechanism is the pay-as-you-go, or PAYGO, sequestration. If legislative changes enacted through the end of a session of Congress increase the deficit (or reduce a projected surplus), a PAYGO sequestration is required at the end of the session. Under the sequestration, mandatory programs (other than those specifically exempt) are cut by enough to eliminate the increase. The PAYGO discipline applies to legislation enacted through 2002, but the sequestration procedure applies through 2006 to eliminate any increase in the deficit or decrease in a projected surplus caused by that legislation.

Both CBO and OMB are required to estimate the net change in the deficit that results from direct spending or receipt legislation. As with the discretionary spending limits, however, OMB's estimates determine whether a sequestration is necessary. CBO has therefore adopted the estimated changes in the deficit from OMB's November final report as the starting point for its estimates. In that report, OMB estimated PAYGO balances of up to \$6 million for each year between 1999 and 2002 because the net effect of legislation affecting mandatory spending or receipts enacted since the Balanced Budget Act was to increase the deficit for those years (see Table A-2). OMB also estimated a -\$11 million balance for fiscal year 1998. CBO shows that amount as zero, however, because the balance is not available to offset increases in mandatory spending in fiscal year 1999.

OMB's estimates included legislation for which PAYGO reports had been issued before the statutory publication date of its final report (15 days after the end of a session of Congress). According to the Balanced Budget Act, the current year effects of legislation for

which OMB issues PAYGO reports after publication of the final report must be added to the balances for the following year to determine whether a sequestration is required. Accordingly, Table A-2 includes the 1998 effect, as well as the effect for the following five years, of legislation passed in the first session of the 105th Congress that was not part of OMB's final report. In-

cluding those amounts (which total -\$156 million) plus the 1999 effect of PAYGO legislation enacted since the Balanced Budget Act (\$33 million) gives a PAYGO balance of -\$123 million. Thus, the Congress could enact legislation increasing mandatory spending or decreasing revenues in 1999 by a total of \$123 million without triggering a PAYGO sequestration.

Table A-2.
Budgetary Effects of Direct Spending or Receipt Legislation
Enacted Since the Balanced Budget Act of 1997 (By fiscal year, in millions of dollars)

	1998	1999	2000	2001	2002	2003
Total for OMB's November Final Report ^a	0	6	6	3	1	0
Legislation Enacted Since OMB's Final Report						
National Defense Authorization Act for Fiscal Year 1998 (P.L. 105-85)	-159	9	17	19	-13	-35
Adoption and Safe Families Act of 1997 (P.L. 105-89)	-1	0	0	0	0	7
Veterans' Benefits Act of 1997 (P.L. 105-114)	1	1	1	0	0	0
Food and Drug Modernization Act of 1997 (P.L. 105-115) ^b	0	12	33	54	28	7
50 States Commemorative Coin Program Act (P.L. 105-124)	1	-5	-2	-4	-5	-5
Hispanic Cultural Center Act of 1997 (P.L. 105-127)	0	6	6	1	0	0
Surface Transportation Extension Act of 1997 (P.L. 105-130)	0	-2	-8	-19	-33	-47
Lower Brule Sioux Tribe Infrastructure Trust Development Fund (P.L. 105-132)	0	0	1	2	3	3
Small Business Reauthorization Act of 1997 (P.L. 105-135)	2	4	4	3	3	2
An act to authorize the acquisition of certain real property for the Library of Congress (P.L. 105-144) ^b	-2	2	0	0	0	0
An act to amend the Consolidated Omnibus Reconciliation Act of 1985 relating to Customs user fees (P.L. 105-150)	<u>-2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Change in the Deficit Since the Balanced Budget Act of 1997	-156	33	58	59	-16	-68

SOURCE: Congressional Budget Office.

NOTES: The following bills affected direct spending or receipts but did not increase or decrease the deficit by as much as \$500,000 in any year through 2003: Savings Are Vital to Everyone's Retirement Act of 1997 (P.L. 105-92); Asian Elephant Conservation Act of 1997 (P.L. 105-96); Veterans' Compensation Rate Amendments Act of 1997 (P.L. 105-98); Veterans' Cemetery Protection Act of 1997 (P.L. 105-101); an act to waive time limitations to allow the Medal of Honor to be awarded to Robert R. Ingram (P.L. 105-103); an act to grant the consent of Congress to the Apalachicola-Chattahoochee-Flint River Basin Compact (P.L. 105-104); an act to grant the consent of Congress to the Alabama-Coosa-Tallapoosa River Basin Compact (P.L. 105-105); an act to allow revision of veterans benefits decisions based on clear and unmistakable error (P.L. 105-111); an act to prohibit internment or memorialization in certain cemeteries of persons committing Federal or State capital offenses (P.L. 105-116); Aviation Insurance Reauthorization Act of 1997 (P.L. 105-137); Atlantic Striped Bass Conservation Act Amendments of 1997 (P.L. 105-146); No Electronic Theft (NET) Act (P.L. 105-147).

OMB = Office of Management and Budget; P.L. = Public Law.

a. Under section 252 of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended, only the effect on the deficit of legislation not reflected in OMB's final sequestration report is carried over to the pay-as-you-go (PAYGO) calculations for the following preview report. Thus, the 1998 balance of -\$11 million in OMB's November report is shown as zero because it cannot be included in the calculation of the 1999 PAYGO balance. Section 254 of that act calls for a list of all bills that are included in the pay-as-you-go calculation. Because the data in this table assume OMB's estimate of the total change in the deficit resulting from bills enacted through the date of its report, readers are referred to the list of those bills included in Tables 6 and 7 of the *OMB Final Sequestration Report to the President and Congress* issued on November 24, 1997, and in previous sequestration reports issued by OMB.

b. Change in outlays and receipts.

Budget Resolution Targets and Actual Outcomes: 1980-1997

Actual spending, revenue, and deficit levels for fiscal year 1997 turned out to be quite different from those that were set forth in the budget resolution for 1997. Adopted in June 1996, just over three months before the start of fiscal year 1997, the budget resolution anticipated a total budget deficit of \$153 billion for the year. However, the actual 1997 deficit—\$22 billion—was \$131 billion lower than the figure in the resolution. Revenues were \$110 billion higher than anticipated by the budget resolution and outlays were \$21 billion lower than expected.

This appendix analyzes those differences and also compares the 1997 differences with historical experience since 1980. Fiscal year 1997 was the fifth straight year in which the actual deficit was less than that anticipated by the budget resolution. Before fiscal year 1993, the actual deficit exceeded the target in the budget resolution for 13 years in a row. Over the entire period, the difference between budget resolution targets and actual deficits has ranged from less than 1 percent to over 11 percent of actual outlays. For fiscal year 1997, the lower-than-expected deficit was about 8 percent of total outlays for the year.

The 1997 budget resolution recommended that an ambitious deficit reduction package intended to balance the federal budget by fiscal year 2002 be enacted before the start of the fiscal year. Only a small portion of the proposed policy changes (notably welfare reform) were enacted by the end of calendar year 1996. Although many of the other proposed policy changes were included in the following year's budget resolution and

eventually were enacted in the Balanced Budget Act and the Taxpayer Relief Act in August 1997, those changes came too late to have a significant effect on 1997 budget outcomes. Therefore, the smaller-than-expected 1997 deficit can largely be attributed to two factors: more favorable economic conditions than expected, and other misestimates that the Congressional Budget Office labels technical.

The result is likely to be similar next year when CBO compares 1998 actual outcomes with the budget resolution for 1998. That resolution (adopted in June 1997) specified a total budget deficit of \$91 billion for 1998. CBO's current projections point to a deficit of only \$5 billion in 1998. In contrast with legislation in 1997, the legislation proposed in the 1998 resolution was enacted before the start of the fiscal year, but that legislation was estimated to push the deficit up slightly in 1998, with savings beginning in 1999. Thus, once again, economic and technical factors will be responsible for a better-than-anticipated budget outcome.

Sources of Differences

The Congressional Budget Office divides the difference between budget resolution levels and actual outcomes into three categories: policy, economic, and technical. Although those categories help to explain the reasons for differences, the lines between them are necessarily somewhat arbitrary.

Policy differences are relatively straightforward—they can arise because of the passage of legislation that the budget resolution did not explicitly anticipate or because the costs or savings from legislation that was anticipated are more or less than originally assumed. An example of the former is emergency appropriations, such as those for aid to victims of natural disasters, which by definition are hard to anticipate. Policy differences can also reflect the failure to enact legislation that the resolution assumed.

The actual performance of the economy is bound to differ from the economic forecast underlying the budget resolution. Every budget resolution is based on assumptions about several economic variables in the national income and product accounts (NIPAs)—chiefly, gross domestic product (GDP), taxable income, unemployment, inflation, and interest rates—needed to estimate revenues and spending for benefit programs and net interest. Typically (as in the 1997 budget resolution), the economic assumptions are drawn from a CBO forecast. In 1982, however, and for most of the years between 1988 and 1992, the Congress chose a different forecast, generally the Administration's.

Information available at the end of the fiscal year is used to determine the portion of the difference between estimates in the budget resolution and actual revenue and outlay totals that should be ascribed to economic factors. (That allocation is not subsequently adjusted, even though revisions of data about GDP and taxable income continue to trickle in over a number of years.) Only differences that can be directly linked to the major NIPA variables are labeled economic in CBO's analysis. Other differences that might be tied to economic performance (such as capital gains realizations) are not included in this category because they are not included in the NIPAs.

Differences that do not arise directly from legislative or economic sources are classified as technical differences. The largest dollar impacts of such differences are concentrated in revenues and in open-ended commitments of the government such as entitlement programs. In the case of revenues, technical differences arise from various factors including changes in administrative tax rules, differences in sources of taxable income not captured by the NIPA accounts, and changes in the relative amounts of income taxed at the various income tax rates. As noted above, changes to revenues

and entitlement programs that are related to the state of the economy but are not tied directly to the NIPA forecast are classified as technical. Large technical differences often prompt both CBO and the Administration to review their projection methods, but some differences are to be expected given the size and complexity of the federal budget. The portions of the budget that have contributed the largest technical differences since 1980 are noted at the end of this appendix.

The Budget Resolution for Fiscal Year 1997

The Congressional budget resolution for fiscal year 1997 charted a course of steep reductions in the deficit that would lead to a balanced budget over six years. It also specified a tax cut that would have reduced revenues by \$17 billion in 1997. Although the resolution assumed that most of the necessary spending cuts would take place in later years, the Congress did plan to begin cutting both discretionary and mandatory spending in fiscal year 1997. The level of discretionary

Table B-1.
Comparison of the 1997 Budget Resolution and the Actual Budget Totals for Fiscal Year 1997
(In billions of dollars)

	Budget Resolution ^a	Actual ^b	Actual Minus Budget Resolution
Revenues	1,469	1,579	110
Outlays	1,622	1,601	-21
Deficit	-153	-22	131

SOURCE: Congressional Budget Office.

NOTE: Totals include Social Security and the Postal Service, which are off-budget.

a. Concurrent Resolution on the Budget for Fiscal Year 1997.

b. From Department of the Treasury, *Final Monthly Treasury Statement*, Fiscal Year 1997 (October 1997), as revised by subsequent monthly statements.

spending that the budget resolution proposed for 1997 was \$539 billion—\$11 billion below the amount needed to keep pace with inflation. The budget resolution also called for reducing mandatory spending by \$20 billion below current-law levels in 1997.

The resolution called for total outlays of \$1,622 billion, revenues of \$1,469 billion, and a deficit of \$153 billion (see Table B-1). Ultimately, outlays were \$21 billion lower than envisioned and revenues were \$110 billion higher, resulting in a deficit that was \$131 billion smaller. Policy actions accounted for \$5 billion of that difference and economic factors for \$37 billion, but technical factors accounted for the bulk of the difference—\$89 billion. The substantial underestimate in revenues can be attributed to legislative, economic, and technical factors, all of which contributed to higher-than-expected revenues. In the case of outlays, however, lower-than-expected spending that CBO attributed to technical factors was partially offset by differences in policy actions and economic assumptions.

Changes in Policies

About \$5 billion of the unanticipated reduction in the deficit can be attributed to the difference between the

policy changes proposed in the budget resolution and actual legislation enacted (see Table B-2). The resolution called for reductions in both taxes and spending, but most of the proposed policy changes were not enacted in time to affect 1997 outcomes. Although Airport and Airway Trust Fund taxes were temporarily reinstated, legislation providing for the large tax cuts specified in the budget resolution was delayed for a year—pushing revenues up by \$20 billion compared with the planned policy changes.

Legislative actions that did not fully reflect the spending cuts proposed in the budget resolution boosted spending by \$15 billion, partially offsetting the effect on the deficit of those additional revenues. Of the \$20 billion in mandatory spending cuts assumed in the budget resolution, \$11 billion were enacted. The budget resolution assumed \$3 billion in savings from welfare reform proposals that were, for the most part, enacted in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. In addition, legislative language included in the 1997 appropriation bills reduced mandatory outlays by \$7 billion, mostly through one-time savings. The largest of those provisions included accelerating the payment of deposit insurance premiums and auctioning the rights to use portions of the electromagnetic spectrum. Most of the \$9

Table B-2.
Sources of Differences Between the Actual Budget Totals for Fiscal Year 1997 and the 1997 Budget Resolution (In billions of dollars)

	Policy Differences			Economic Differences	Technical Differences	Total Difference
	Emergencies	Other	Subtotal			
Revenues	0	20	20	44	46	110
Outlays						
Discretionary spending	2	4	6	0	4	10
Mandatory spending ^a	0	9	9	-3	-39	-33
Net interest	<u>b</u>	<u>b</u>	<u>b</u>	<u>9</u>	<u>-7</u>	<u>2</u>
Total	2	13	15	7	-43	-21
Deficit	-2	7	5	37	89	131

SOURCE: Congressional Budget Office.

a. Includes offsetting receipts and net outlays for deposit insurance.

b. Less than \$500 million.

billion shortfall in anticipated savings in mandatory spending was attributable to \$7 billion in planned Medicare cuts in 1997 that were not enacted.

The budget resolution assumed that discretionary outlays would total \$539 billion in fiscal year 1997. The nonemergency discretionary spending actually enacted that year was \$4 billion higher than that level (not including the nearly \$7 billion in mandatory savings attributed to appropriation bills). In addition, the Congress approved \$2 billion in discretionary emergency appropriations in 1997. (Under the terms of the Deficit Control Act of 1985, emergency spending is not constrained by the statutory caps on discretionary spending.) Those actions added \$6 billion in discretionary spending to the amount assumed in the budget resolution.

Economic Factors

The economic assumptions of the 1997 budget resolution (which were made in early 1996) proved to be too pessimistic: differences between assumed and actual economic performance accounted for an estimated \$37 billion of the lower-than-expected deficit (see Table B-2).

That economic difference resulted in almost \$44 billion in higher-than-expected revenues. The types of income taxed at the highest rates grew more rapidly than expected. Wages and salaries, by far the largest tax base, grew by 6.5 percent rather than the 4.8 percent assumed in the budget resolution (see Table B-3). In addition, corporate profits, also taxed at relatively high rates, grew 3.7 percentage points faster than previously assumed.

Table B-3.
Comparison of the 1997 Economic Forecasts in the Budget Resolution and Actual Outcomes for Fiscal Year 1997

	Budget Resolution ^a	Actual	Actual Minus Budget Resolution
Nominal GDP (Billions of dollars)	7,855	7,972	117
Nominal GDP (Percentage change)	4.9	5.8	0.9
Real GDP (Percentage change)	2.0	3.7	1.7
GDP Implicit Deflator (Percentage change) ^b	2.8	2.1	-0.7
CPI (Percentage change) ^c	3.1	2.7	-0.4
Unemployment Rate (Percent)	6.0	5.1	-0.9
Three-Month Treasury Bill Rate (Percent)	4.8	5.0	0.2
Ten-Year Treasury Note Rate (Percent)	5.5	6.5	1.0
Wages and Salaries (Percentage change)	4.8	6.5	1.7
Corporate Profits (Percentage change)	5.2	8.9	3.7

SOURCE: Congressional Budget Office.

- a. The 1997 budget resolution was based on CBO's economic projections that assumed balanced-budget policy, found in *The Economic and Budget Outlook: Fiscal Years 1997-2006* (May 1996).
- b. The implicit GDP deflator is virtually the same as the GDP price index.
- c. The consumer price index for all urban consumers.

The economic impact on revenues was partially offset by higher spending for interest on government debt. Interest rates on 10-year Treasury notes averaged 1 percentage point higher in 1997 than the budget resolution assumed; short-term rates were higher by a lesser amount. Overall, higher interest rates boosted net interest outlays by \$9 billion. At the same time, outlays for Social Security, Medicare, and other benefit programs were diminished by lower-than-expected inflation and unemployment.

Technical Factors

The bulk of the lower-than-expected deficit—\$89 billion—resulted from higher revenues and lower outlays that cannot be traced to legislative actions or economic assumptions. CBO attributes such differences to technical factors (see Table B-2). Approximately \$43 billion of that overestimate fell on the outlay side of the budget and the other \$46 billion on the revenue side. Most of the \$46 billion in additional revenues resulted from unexpectedly high individual income tax receipts, especially higher-than-expected revenues from capital gains realizations, and a greater amount of personal income being taxed at the top income bracket rate. Although such factors are fundamentally economic in nature, they are classified as technical because they are not included in the NIPA measure.

Most of the overestimate of outlays occurred in the category of mandatory spending. Spending for Medicaid was \$10 billion lower than anticipated in early 1996, while Medicare outlays fell short of the amounts assumed in the budget resolution by \$8 billion (not counting the anticipated policy savings). Spending was more than \$3 billion less than expected for Social Security and family support programs. In addition, net outlays for deposit insurance were about \$5 billion less than assumed in the budget resolution.

Budget Resolutions for 1980 Through 1997

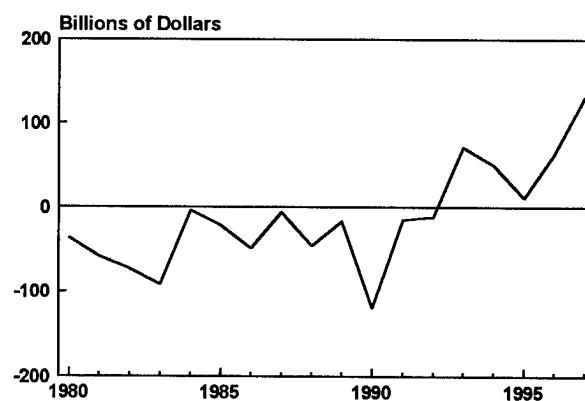
From 1980 through 1992, the actual deficit consistently exceeded the target in the budget resolution by amounts ranging from \$4 billion in 1984 to \$119 billion in 1990

(see Table B-4). That pattern changed in 1993 because spending for deposit insurance was lower than expected. In 1994 through 1997, the deficit continued to come in below the resolutions' targets, but in each of those years the improvement was more broadly based (see Figure B-1).

Policy action or inaction (the failure to achieve savings called for in the budget resolutions) has added an average of \$10 billion a year to the deficit. In only four of the years since 1980 did policymakers trim the deficit by more, or add to it by less, than the resolution provided. The reasons vary: in fiscal year 1982 (the first Reagan-era budget), the first-year tax cut in the Economic Recovery Tax Act of 1981 was smaller than the resolution assumed; in 1987, the Tax Reform Act of 1986 temporarily swelled collections; in 1991, \$43 billion in contributions was received from foreign nations to help finance Operation Desert Storm, lowering total outlays commensurately; and in 1997, the tax reductions assumed in the resolution were enacted a year later than planned—too late to affect 1997 revenues significantly.

Forecasting the economy is always an uncertain business, and the forecast for the budget resolution is usually made nine months before the start of the fiscal

Figure B-1.
Differences Between Actual Deficits and
Deficits in the Budget Resolution,
Fiscal Years 1980-1997



SOURCE: Congressional Budget Office.

NOTE: Negative numbers indicate an increase in the deficit.

Table B-4.
Sources of Differences Between Actual Budget Totals and Budget Resolution Estimates,
Fiscal Years 1980-1997 (In billions of dollars)

	Policy Differences	Economic Differences	Technical Differences	Total Difference	Difference as a Percentage of Actual
Revenues					
1980	6	8	-4	11	1.9
1981	-4	5	-13	-11	-2.0
1982	13	-52	-1	-40	-6.5
1983	-5	-58	-3	-65	-11.0
1984	-14	4	-4	-13	-2.1
1985	a	-20	3	-17	-2.3
1986	-1	-23	-2	-27	-3.4
1987	22	-27	7	2	0.2
1988	-11	4	-17	-24	-2.6
1989	1	34	-8	26	2.7
1990	-7	-36	9	-34	-3.3
1991 ^b	-1	-31	-24	-56	-5.3
1992	3	-46	-34	-78	-7.1
1993	4	-28	3	-20	-1.8
1994	-1	12	4	15	1.2
1995	a	16	1	17	1.3
1996	-1	24	12	36	2.4
1997	20	44	46	110	7.0
Average	1	-9	-1	-10	-1.7
Absolute Average ^c	6	26	11	34	3.6
Outlays					
1980	20	12	16	48	8.1
1981	25	6	16	47	6.9
1982	1	24	8	33	4.4
1983	18	a	8	26	3.2
1984	1	7	-18	-9	-1.2
1985	23	-5	-13	5	0.5
1986	14	-12	20	22	2.2
1987	7	-12	13	8	0.8
1988	-2	12	12	22	2.1
1989	17	14	12	43	3.8
1990	13	13	59	85	6.8
1991 ^b	-19	1	-22	-40	-3.0
1992	15	-21	-60	-66	-4.8
1993	16	-19	-90	-92	-6.6
1994	10	-9	-36	-35	-2.4
1995	2	17	-14	6	0.3
1996	25	-24	-29	-28	-1.8
1997	15	7	-43	-21	-1.3
Average	11	1	-9	3	1.0
Absolute Average ^c	14	12	22	33	3.3

(Continued)

Table B-4.
Continued

	Policy Differences	Economic Differences	Technical Differences	Total Difference	Difference as a Percentage of Actual ^d
Deficit^e					
1980	-13	-4	-19	-36	-6.1
1981	-28	-1	-29	-58	-8.6
1982	12	-76	-9	-73	-9.8
1983	-22	-59	-11	-92	-11.4
1984	-15	-3	14	-4	-0.5
1985	-23	-15	16	-22	-2.3
1986	-16	-11	-22	-49	-4.9
1987	15	-15	-6	-6	-0.6
1988	-9	-8	-29	-46	-4.3
1989	-17	20	-20	-17	-1.5
1990	-20	-49	-50	-119	-9.5
1991 ^b	19	-32	-2	-15	-1.1
1992	-12	-25	26	-11	-0.8
1993	-12	-9	93	72	5.1
1994	-11	21	40	50	3.4
1995	-2	-2	15	11	0.7
1996	-25	48	40	63	4.0
1997	5	37	89	131	8.2
Average	-10	-10	8	-12	-2.2
Absolute Average ^c	15	24	29	49	4.6

SOURCE: Congressional Budget Office.

NOTES: Differences are actual outcomes minus budget resolution assumptions.

The allocation of revenue differences between economic and technical factors is done soon after the fiscal year in question and is not changed later to incorporate revisions in economic data.

- a. Less than \$500 million.
- b. Based on the fiscal year 1991 budget summit agreement, as assessed by CBO in December 1990.
- c. The absolute average disregards whether the differences are positive or negative.
- d. Differences in the deficit are calculated as a percentage of actual outlays.
- e. Negative numbers indicate an increase in the deficit.

year. The attribution of each fiscal year's economic errors shown in Table B-4 was based on the economic data available shortly after the end of the fiscal year. Those data in fact continue to be revised for years, often by large amounts. Although CBO does not attempt to make reassessments based on revised economic data, doing so could significantly alter the attribution of errors in past years. Nevertheless, those data suggest that until fiscal year 1993, budget resolutions tended to use short-term economic assumptions that proved overly

optimistic. The largest errors, not surprisingly, were in years marked by recession or the early stages of recovery—namely, in 1982 and 1983 and again in the 1990-1992 period. Since 1993, that pattern has largely been reversed. Short-term economic assumptions in fiscal years 1993 through 1997 either proved quite accurate or tended to be overly pessimistic.

Regardless of the direction of the error in the short-term forecast, economic differences primarily affect

revenues and, on the spending side of the budget, net interest. Such economic differences have caused the deficit target in the budget resolution to be off, in absolute terms, by an average of \$24 billion a year in one direction or another—mostly because the assumptions were too optimistic. Despite the recent pattern, economic differences have still caused Congressional drafters, on average, to underestimate the deficit by \$10 billion.

Over the 1980-1997 period, the average effect of technical differences between the budget resolution and the actual fiscal year outcome has been to lower the deficit by \$8 billion. In absolute terms, disregarding whether the errors were positive or negative, such differences caused the average estimate of the deficit to be off by \$29 billion. The causes of such large technical estimating errors have varied over the years. On the revenue side, such misestimates were generally not very great through 1990, but they ballooned in 1991 and 1992, when tax collections were weaker than economic data seemed to justify. Over the past two years, however, revenues have been much higher than expected. On the outlay side, farm price supports, receipts from offshore oil leases, defense spending, and benefit programs dominated the errors through the mid-1980s. Underestimates of benefit outlays, especially for health care programs, swelled again in 1991 and 1992, but in the past four years both Medicare and Medicaid spending have been overestimated. Deposit insurance, a major source of technical errors during the height of the savings and loan crisis, has become a less significant factor over the past two years.

Because the size of the federal budget has grown considerably since 1980, differences between the revenue and spending levels set forth in the budget resolutions and the actual outcomes are best compared as a percentage of total revenues or outlays. Over the 1980-1997 period, disregarding the direction of the error,

total differences for both revenues and outlays averaged between 3 percent and 4 percent of the actual levels (see Table B-4). The \$110 billion total difference in revenues for 1997—7 percent of actual revenues for the year—was above that average but not without precedent. For example, in 1983 the budget resolution's total overestimate of revenues was 11 percent of actual revenues in that year, and in 1992 the difference in revenues from that year's budget resolution target was 7.1 percent of the actual revenue level.

In 1997, the total difference in outlays from the budget resolution target was 1.3 percent of actual outlays for the year—notably below the 3.3 percent absolute average difference for the 1980-1997 period. Historically, differences between outlay targets specified in budget resolutions and actual outcomes have ranged from a high of 8.1 percent of outlays in 1980 to a low of 0.3 percent of outlays in 1995.

The magnitude of the total difference between actual deficits and those amounts specified in budget resolutions, viewed as a percentage of total outlays, depends greatly on whether or not the revenue and outlay differences offset each other. For years in which the errors in revenues and outlays went in opposite directions relative to the deficit, the difference in the deficit dropped to as low as 0.5 percent of actual outlays. In other years, however, where the errors in revenues and outlays both raised or lowered the deficit, that difference was as high as 11.4 percent of outlays. For fiscal year 1997, misestimates of revenues and outlays combined to produce a total difference in the deficit that was 8.2 percent of actual outlays for the year. Over the 1980-1997 period, there were 10 years in which the revenue and outlay errors went in the same direction relative to the deficit. In four of those years—1981, 1982, 1983, and 1990—the total difference in the deficit as a percentage of the actual outlays for the year exceeded the 1997 figure.

How the Economy Affects the Budget

The federal budget is highly sensitive to the economy. Revenues depend on taxable incomes—including wages and salaries, interest and other nonwage income, and corporate profits—which generally move in step with overall economic activity. Many benefit programs are pegged to inflation, either directly (like Social Security) or indirectly (like Medicare). And the Treasury continually borrows and refinances the government's debt at market interest rates.

The Congressional Budget Office has described some of the links between key economic assumptions and federal budget projections with three rules of thumb. For CBO's purposes, rules of thumb are defined as rough orders of magnitude for gauging the effects on the baseline budget projections of changes in individual economic variables taken in isolation. Those rules illustrate the impact on budget totals of changes in real growth, inflation, and interest rates. The real growth rule shows the effects of growth that is 0.1 percentage point slower than in CBO's baseline, starting in January 1998. The inflation and interest rate rules assume each is 1 percentage point greater than CBO's baseline, starting in January 1998. Each of the three rules is roughly symmetrical; the impact of faster growth, lower inflation, or lower interest rates would be about the same size as those shown in Table C-1, but with the opposite sign. Sustained errors of 0.1 or 1 percentage point are used for the sake of simplicity; they do not represent typical forecasting errors. The rule-of-thumb calculations should be used with caution beyond these limited changes, because they do not incorporate the impact that large changes would have on the full range of economic assumptions and budget projections.

Furthermore, budget projections are also subject to other kinds of errors that are technical in nature and not directly related to economic forecasting. There is no way, however, to develop rules of thumb for those other uncertainties.

Each year, CBO presents rules of thumb in its annual report. Their magnitudes change somewhat from year to year because of the intervening growth in the economy (principally affecting revenues), changes in interest rates, new projections of growth in benefit programs, and changes in laws limiting annual appropriations. The rule of thumb for economic growth is an illustration of the change in the budget if the growth of potential gross domestic product (GDP) departs from the baseline, not an illustration of the effects of a cyclical change. The rule of thumb is based on a permanent decline of 0.1 percentage point in real growth instead of a larger temporary change. Although it is not unreasonable to assume that real growth could be 1 percentage point lower than CBO's baseline over the next few years because of cyclical effects, it does not seem realistic to assume that real growth could be as much as 1 percentage point lower than the baseline projections for the next 10 years.

Real Growth

Strong economic growth improves the federal budget's bottom line, and weak economic growth worsens it. The first rule of thumb outlines the budgetary impact of economic growth that is slightly weaker than that assumed in CBO's baseline.

Table C-1.
Effects of Selected Economic Changes on CBO Budget Projections
(By fiscal year, in billions of dollars)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Real Rate of Growth Is 0.1 Percentage Point a Year Lower Beginning in January 1998											
Change in Revenues	-1	-3	-5	-7	-9	-12	-15	-18	-22	-25	-29
Change in Outlays											
Net interest (Debt service)	a	a	a	1	1	2	3	5	6	8	10
Mandatory spending	a	a	a	a	a	a	a	a	a	a	a
Change in Deficit or Surplus ^b	-1	-3	-5	-8	-11	-14	-18	-23	-28	-34	-40
Inflation Rate Is 1 Percentage Point a Year Higher Beginning in January 1998^c											
Change in Revenues	9	26	45	65	87	111	139	168	203	240	281
Change in Outlays											
Net interest											
Higher rates	5	15	20	23	25	27	27	27	27	27	26
Debt service	b	b	-1	-1	-3	-4	-7	-9	-13	-17	-23
Discretionary spending	0	0	0	0	0	6	12	18	25	32	40
Mandatory spending	<u>1</u>	<u>8</u>	<u>17</u>	<u>28</u>	<u>40</u>	<u>53</u>	<u>67</u>	<u>84</u>	<u>100</u>	<u>120</u>	<u>141</u>
Total	6	22	37	50	62	81	99	120	140	161	184
Change in Deficit or Surplus ^b	3	4	8	15	24	30	40	48	63	79	97
Interest Rates Are 1 Percentage Point a Year Higher Beginning in January 1998											
Change in Revenues	0	0	0	0	0	0	0	0	0	0	0
Change in Outlays											
Net interest											
Higher rates	5	15	20	23	25	27	27	27	27	27	26
Debt service	b	1	2	4	6	8	10	13	16	19	22
Mandatory spending	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>
Total	6	17	24	28	32	36	39	42	45	47	50
Change in Deficit or Surplus ^b	-6	-17	-24	-28	-32	-36	-39	-42	-45	-47	-50

SOURCE: Congressional Budget Office.

a. Less than \$500 million.

b. A minus sign indicates an increase in the deficit or a decrease in the surplus.

c. Assuming that discretionary spending grows with inflation after the statutory caps expire in 2002.

In CBO's baseline, growth of real GDP averages above 2 percent a year. Subtracting 0.1 percentage point from the rate of real growth, beginning in January 1998, implies slightly slower growth throughout the projection period. Under that slower-growth scenario, GDP lies roughly 1 percent below CBO's baseline assumption by 2008.

That scenario implies lower growth in taxable incomes, leading to revenue losses that mount from \$1 billion in 1998 to \$29 billion in 2008 (see Table C-1). The loss in revenues in 2008 is roughly 1 percent of baseline revenues, on a par with the loss in GDP. In addition, the government borrows more and incurs greater debt-service costs. In sum, the projected surplus in 2008 would be an estimated \$40 billion smaller than in CBO's baseline.

Inflation

Inflation produces effects on federal revenues and outlays that partly offset each other. The second rule of thumb shows the budgetary impact of inflation that is 1 percentage point higher than CBO's baseline assumption. If other economic variables are not affected, higher inflation leads to larger taxable incomes and hence greater revenues. But higher inflation also boosts spending. Nearly all benefit programs would cost more, although with a lag; so would discretionary programs, unless policymakers decided to ignore the steady erosion of real budgetary resources. And interest rates would almost surely rise with inflation, increasing the cost of servicing the government's debt.

In estimates produced in previous years, higher inflation had relatively little effect on the total budget outcome, as revenues rose nearly in tandem with outlays. In the context of the current budget projections, however, the additional revenue from higher inflation exceeds the extra spending, increasing the projected surplus in 2008 by \$97 billion (about 0.7 percent of GDP). The change in the rule-of-thumb results for inflation stems from several factors underlying the current budget projections: increased taxable incomes, lower interest costs associated with a smaller projected debt, and elimination of the inflationary adjustment to the discretionary spending caps.

An increase of 1 percentage point in inflation boosts revenues by \$281 billion by 2008. The effect of inflation on revenues is a little stronger than CBO estimated a year ago because projected taxable income is higher (largely because wages and salaries and corporate profits are expected to represent a larger share of GDP). More important for the effect on the deficit or surplus, the estimated increase in outlays resulting from higher inflation is no longer big enough to largely offset the increase in revenues.

CBO estimates that an increase of 1 percentage point in the annual rate of inflation would raise outlays by \$184 billion in 2008. Spending for entitlement and other mandatory programs accounts for most of that change. Many of those programs have statutory cost-of-living adjustments that automatically boost spending to keep up with inflation, whereas spending for others grows as a result of increases in prices for the goods and services provided by the programs. Such an increase in inflation would cause spending for entitlements and other mandatory programs to grow by \$141 billion in 2008, similar to the effect estimated last year.

For deriving the rule of thumb, CBO assumes that interest rates rise in step with inflation. CBO estimates that higher interest rates from an increase of 1 percentage point in inflation would boost projected spending for net interest by \$26 billion in 2008. However, given the low deficits and eventual surpluses projected in CBO's baseline, the stock of debt that would be affected by increased interest rates is considerably lower than that of previous years' estimates. Therefore, the effect of higher inflation on interest payments has been dampened. Furthermore, the resulting overall reduction in debt-service costs under the higher-inflation scenario improves the budget's bottom line by \$23 billion in 2008. In sum, the net effect of inflation on interest costs would lower the surplus in 2008 by \$3 billion.

A change in the statutory rules governing discretionary programs also has reduced the estimated increase in outlays. As discussed in Chapter 2, the Balanced Budget Act of 1997 extended the statutory caps on discretionary spending through 2002. In addition, the Balanced Budget Act eliminated the provision of the Deficit Control Act that called for adjustments to the caps to reflect changes in inflation. Thus, for the years constrained by those caps (1998 through 2002), changes in inflation have no effect on projections of

discretionary spending. The CBO baseline assumes that once the caps expire, discretionary spending grows with the rate of inflation. As a result, an increase of 1 percentage point in inflation generates extra discretionary spending of \$6 billion in 2003 and \$40 billion by 2008.

Alternatively, if it is assumed that discretionary spending after 2002 is frozen at the 2002 level regardless of inflation, there would be no increase in discretionary spending under the rule-of-thumb scenario, and the increase in the projected surplus in 2008 would total \$145 billion. In that case, discretionary spending projected for 2008 would be 25 percent below the level required to keep pace with inflation between 1998 and 2008.

Interest Rates

The final rule of thumb illustrates the sensitivity of the budget to interest rates. The Treasury finances the government's large debt at market interest rates. Assuming that interest rates are 1 percentage point higher than in

the baseline for all maturities in each year, and that all other economic variables are unchanged, interest costs would be almost \$5 billion higher in 1998. That initial boost in interest costs is fueled largely by the extra costs of refinancing the government's short-term Treasury bills, which make up about one-fifth of the marketable debt. More than \$700 billion worth of Treasury bills are now outstanding, all of them maturing within the next year.

The bulk of the marketable debt, however, consists of medium- and long-term securities, which were issued with initial maturities of two to 10 years. Many of those securities will come due for refinancing over the next several years. Therefore, the Treasury periodically rolls over maturing debt—even when the government is running a surplus, most of the maturing debt must be rolled over. Thus, the budgetary effects mount as more and more debt is issued at higher interest rates. By 2008, the vast majority of the debt would be affected. Of the marketable debt outstanding at the end of that year, CBO estimates that only about 17 percent would be unaffected by higher interest rates. As a result of the rise in interest rates, the projected surplus in 2008 would decrease by \$50 billion.

The Federal Sector of the National Income and Product Accounts

In addition to the usual budget presentation, the economic influence of federal government revenues and spending can be portrayed through the national income and product accounts (NIPAs). The NIPAs provide a picture of government activity in terms of production, distribution, and use of output. That approach recasts the government's transactions into categories that affect gross domestic product, income, and other macroeconomic totals, thereby helping to trace the relationship between the federal sector and other areas of the economy.

Relationship Between the Budget and the NIPAs

A handful of major differences distinguish the NIPA version of federal receipts and expenditures from its budgetary counterpart. One example is the shift of selected dollars from the spending to the receipt side of the budget to reflect voluntary or intrabudgetary payments that the budget records as negative outlays. Such shifts are referred to as *netting and grossing* adjustments and do not affect the deficit or surplus (see Table D-1). The vast majority of netting and grossing adjustments are voluntary premiums for Medicare coverage (\$21 billion in 1998) and intrabudgetary receipts for retirement contributions on behalf of federal workers (\$71 billion in 1998).

By contrast, other differences between the federal budget and the NIPAs do affect the deficit or surplus. The NIPA totals exclude transactions that involve the transfer of existing assets and liabilities and therefore do not contribute to current income and production. Prominent among such *lending and financial* adjustments are those for deposit insurance outlays, loan transactions and credit subsidies, and sales of government assets. In 1997, such lending and financial transactions totaled nearly \$27 billion. Almost half of that total was attributed to \$11 billion in receipts from the auctioning of rights to use portions of the electromagnetic spectrum. In 1998 and 1999, lending and financial adjustments are expected to contribute an average of \$11 billion to the difference between the federal budget deficit and the NIPA deficit. Other factors driving a wedge between budget and NIPA deficit accounting include *geographic adjustments* (the exclusion of Puerto Rico, the Virgin Islands, and a few other areas from the national economic statistics) and *timing adjustments* (such as correcting for irregular numbers of benefit checks, paychecks, or Medicare payments to health maintenance organizations because of calendar quirks).

Another difference between the NIPA and the unified budget lies in their differing treatment of *investment and capital consumption*. The unified budget includes all expenditures of the federal government, including investment purchases such as buildings and aircraft carriers. The NIPA budget shows the current or

Table D-1.
Relationship of the Budget to the Federal Sector of the
National Income and Product Accounts (By fiscal year, in billions of dollars)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Receipts												
Revenue (Budget basis) ^a	1,579	1,665	1,729	1,779	1,847	1,930	2,008	2,105	2,208	2,314	2,426	2,540
Differences												
Netting and grossing												
Government contributions												
for employee retirement	71	71	73	76	79	83	85	89	92	96	100	104
Medicare premiums	20	21	23	25	28	31	35	38	42	46	51	55
Deposit insurance premiums	5	b	b	b	b	b	b	b	b	b	b	b
Other	b	-2	-4	-5	-5	-5	-5	-8	-8	-9	-10	-10
Geographic exclusions	-3	-3	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4
Excise timing adjustments	1	6	-7	0	0	0	0	0	0	0	0	0
Other	<u>19</u>	<u>8</u>	<u>5</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>6</u>	<u>7</u>	<u>6</u>	<u>6</u>
Total	113	101	87	98	105	111	117	123	129	136	143	151
Receipts (NIPA basis)	1,692	1,766	1,816	1,877	1,951	2,041	2,125	2,228	2,337	2,450	2,569	2,691
Expenditures												
Outlays (Budget basis) ^a	1,601	1,670	1,731	1,782	1,833	1,860	1,954	2,034	2,133	2,199	2,297	2,403
Differences												
Netting and grossing												
Government contributions												
for employee retirement	71	71	73	76	79	83	85	89	92	96	100	104
Medicare premiums	20	21	23	25	28	31	35	38	42	46	51	55
Deposit insurance premiums	5	b	b	b	b	b	b	b	b	b	b	b
Other	b	-2	-4	-5	-5	-5	-5	-8	-8	-9	-10	-10
Lending and financial transactions	27	13	10	8	9	17	5	5	6	6	7	5
Defense timing adjustment	1	2	1	1	0	0	0	0	0	0	0	0
Geographic exclusions	-9	-10	-10	-10	-11	-11	-12	-12	-13	-13	-14	-15
Treatment of investment and depreciation	7	8	8	7	7	7	5	3	1	b	-2	-4
Mandatory timing adjustments	0	0	0	0	-5	5	0	0	-15	9	6	0
Other	<u>15</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>	<u>-1</u>
Total	136	103	100	102	102	127	113	115	105	134	136	134
Expenditures (NIPA basis)	1,737	1,773	1,831	1,884	1,934	1,987	2,066	2,149	2,238	2,332	2,433	2,537
Deficit or Surplus												
Deficit (-) or Surplus (Budget basis) ^a	-22	-5	-2	-3	14	69	54	71	75	115	129	138
Differences												
Lending and financial transactions	-27	-13	-10	-8	-9	-17	-5	-5	-6	-6	-7	-5
Defense timing adjustment	-1	-2	-1	-1	0	0	0	0	0	0	0	0
Geographic exclusions	7	7	7	7	8	8	8	9	9	9	10	11
Treatment of investment and depreciation	-7	-8	-8	-7	-7	-7	-5	-3	-1	b	2	4
Mandatory and excise timing adjustments	1	6	-7	0	5	-5	0	0	15	-9	-6	0
Other	<u>4</u>	<u>7</u>	<u>5</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>8</u>	<u>7</u>	<u>7</u>
Total	-23	-2	-13	-4	3	-16	5	7	24	2	7	17
Deficit (-) or Surplus (NIPA basis)	-45	-8	-15	-7	17	54	59	79	99	117	136	155

SOURCE: Congressional Budget Office.

a. Includes Social Security and the Postal Service.

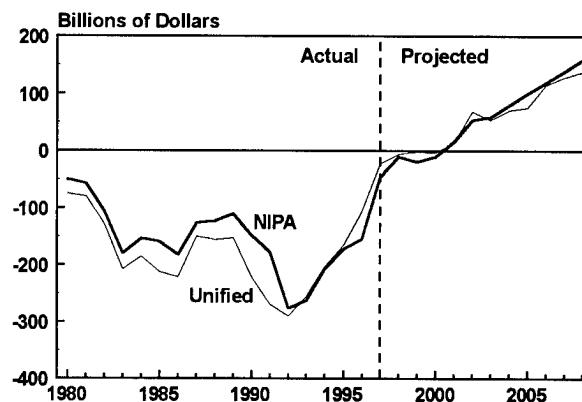
b. Less than \$500 million.

operating account for the federal government; consequently, government investment is left out and government's consumption of fixed capital (depreciation) is included. (Government investment does not disappear but is classed along with private investment rather than in the government accounts.) That parallels the treatment of investment in and depreciation of private-sector assets in the NIPAs. CBO estimates that capital consumption will be \$8 billion greater than new investment in 1998. By 2006, capital consumption is projected to be smaller than investment.

Sometimes the Bureau of Economic Analysis in the Department of Commerce reports actual NIPA expenditure or receipt totals that are larger or smaller than can be readily explained. The NIPA data for fiscal year 1997, calculated as the sum of quarterly data from October 1996 through September 1997, are an example. Even after the familiar adjustments—chiefly for netting and grossing, geographic exclusions, treatment of investment and depreciation, and lending and financial transactions—are made, both NIPA receipts and expenditures appear surprisingly high in 1997. That result is evidenced by the \$19 billion in "other" revenue differences and the \$15 billion in "other" outlay differences in Table D-1, items that are normally quite small. Because those two anomalies effectively cancel one another out, the NIPA deficit for fiscal year 1997 is not much different from what its normal relationship to the budget would imply. Those anomalies suggest that both NIPA receipts and expenditures may need to be revised downward by the Bureau of Economic Analysis. CBO does not assume in its 1998-2008 projections that the unusually large differences found in 1997 will persist.

In the early and mid-1980s, the NIPA deficit and the unified budget deficit generally paralleled each other, and the NIPA deficit was several billion dollars less than the unified budget's (see Figure D-1). During the late 1980s and early 1990s, the difference between the two fluctuated widely because of large swings in lending and financial exclusions. For example, sizable deposit insurance outlays in 1989 through 1991 significantly widened the gap between the NIPA and the unified budget deficit. Since 1992, when both deposit insurance spending and the unified deficit as a whole have been plummeting, the gap between the NIPA and unified measures has narrowed markedly. In 1998, the

Figure D-1.
A Comparison of NIPA and Unified Budget
Deficits (-) and Surpluses, Fiscal Years 1980-2008



SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: NIPA = national income and product accounts.

NIPA deficit is expected to be only \$2 billion larger than the unified budget deficit. As projections of a small unified budget deficit give way to an increasing unified budget surplus beginning in 2001, the pattern of NIPA surpluses consistently outpaces the surpluses found in the unified budget.

NIPA Receipts and Expenditures

The federal sector of the NIPAs generally classifies receipts according to their source and expenditures according to their purpose and destination (see Table D-2).

The leading source of receipts for the federal government in the 1998-2008 period is taxes and fees paid by individuals. Following that category are contributions (including premiums) for social insurance, such as Social Security, Medicare, unemployment insurance, and federal employees' retirement. Those two categories are expected to raise about \$786 billion and \$668 billion, respectively, in 1998. The remaining categories are accruals of taxes on corporate profits, including the

Table D-2.
Projections of Baseline Receipts and Expenditures Measured by the
National Income and Product Accounts (By fiscal year, in billions of dollars)

	Actual 1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Receipts												
Personal Tax and Nontax Receipts	754	786	800	824	860	907	944	997	1,050	1,105	1,166	1,232
Corporate Profits Tax Accruals	206	218	219	219	220	223	231	240	247	258	266	277
Indirect Business Tax and Nontax Accruals	96	94	98	105	110	115	117	119	122	125	127	129
Contributions for Social Insurance	<u>637</u>	<u>668</u>	<u>699</u>	<u>729</u>	<u>761</u>	<u>795</u>	<u>832</u>	<u>872</u>	<u>918</u>	<u>962</u>	<u>1,009</u>	<u>1,054</u>
Total	1,692	1,766	1,816	1,877	1,951	2,041	2,125	2,228	2,337	2,450	2,569	2,691
Expenditures												
Purchases of Goods and Services												
Defense												
Consumption	252	250	257	267	269	282	291	300	313	320	327	341
Consumption of fixed capital	57	57	56	56	55	55	54	54	53	53	53	52
Nondefense												
Consumption	139	143	150	160	168	175	181	186	193	199	206	213
Consumption of fixed capital	<u>12</u>	<u>12</u>	<u>13</u>	<u>13</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>16</u>	<u>16</u>
Subtotal	460	462	476	496	506	525	540	554	574	588	601	622
Transfer Payments												
Domestic	774	797	838	878	926	976	1,032	1,092	1,156	1,224	1,297	1,373
Foreign	<u>14</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>14</u>	<u>14</u>	<u>14</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>16</u>	<u>16</u>
Subtotal	787	810	851	891	939	990	1,046	1,106	1,171	1,239	1,313	1,389
Grants-in-Aid to State and Local Governments	221	234	251	263	274	286	301	316	333	351	371	392
Net Interest	230	228	231	226	220	213	208	203	196	189	180	172
Subsidies Less Current Surplus of Government Enterprises	38	38	38	39	37	38	40	41	43	45	46	48
Required Reductions in Discretionary Spending ^a	<u>n.a.</u>	<u>n.a.</u>	<u>-16</u>	<u>-31</u>	<u>-42</u>	<u>-65</u>	<u>-68</u>	<u>-71</u>	<u>-78</u>	<u>-78</u>	<u>-79</u>	<u>-87</u>
Total	1,737	1,773	1,831	1,884	1,934	1,987	2,066	2,149	2,238	2,332	2,433	2,537
Deficit or Surplus												
Deficit (-) or Surplus	-45	-8	-15	-7	17	54	59	79	99	117	136	155

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Unspecified reductions needed to comply with the statutory caps on discretionary spending.

earnings of the Federal Reserve System, and indirect business tax (chiefly excise taxes) and nontax accruals (chiefly fees).

Government expenditures are classified according to their purpose and destination. Defense and nondefense consumption of goods and services are purchases made by the government for immediate use. The largest share of current consumption is compensation of federal employees. Consumption of fixed government capital (depreciation) is the use the government gets from its fixed assets.

Transfer payments are cash payments made directly to people or foreign nations. Grants-in-aid are payments made by the federal government to state or local governments. They are then used by the states or localities for transfers (such as Medicaid), consumption (such as hiring additional police officers), or investment (such as highway construction).

Although both the unified budget and the NIPAs contain a category labeled "net interest," the NIPA figure is smaller. A variety of differences cause the two measures to diverge. The largest is the contrasting treatment of interest received on late payments of personal and business taxes. In the unified budget, both types of payments are counted on the revenue side, as individual income taxes and corporate income taxes, respectively. In the NIPAs, those differences appear as offsets to federal interest payments, thereby lowering net interest payments by \$13 billion to \$18 billion each year through 2008.

The category labeled "subsidies less current surplus of government enterprises" contains two components, as its name suggests. The first—subsidies—is defined as monetary grants paid by government to businesses, including state and local government enterprises. Subsidies are dominated by housing assistance, which ac-

counts for approximately two-thirds of 1998 subsidy expenditures.

The second portion of the category is the current surplus of government enterprises. Government enterprises are certain business-type operations of the government—for example, the Postal Service. The operating costs of government enterprises are mostly covered by the sale of goods and services to the public rather than by tax receipts. The difference between sales and current operating expenses is the enterprise's surplus or deficit. *Government enterprises* should not be confused with *government-sponsored enterprises* (GSEs), private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Examples of GSEs include the Federal National Mortgage Association (Fannie Mae) and the Student Loan Marketing Association (Sallie Mae). As privately owned organizations, GSEs are not included in the budget or in the federal sector of the NIPAs.

A final category under expenditures is required reductions in discretionary spending (see Table D-2). That is not a category in the NIPAs; rather, it is an accounting for those policy changes that must be made in the future. The discretionary expenditures included in the NIPA categories reflect 1998 levels of spending, adjusted for inflation each year. The Balanced Budget Act of 1997 established statutory limits on total discretionary spending, forcing policymakers to reduce spending below those levels. The law requires unspecified savings of \$16 billion in 1999 and increasing amounts thereafter. Those savings cannot be assigned to any particular NIPA category because policymakers can comply with the discretionary spending caps in any number of ways, but reductions are most likely to come from defense and nondefense consumption and grants to states and local governments.

Historical Budget Data

This appendix provides historical data for revenues, outlays, and the deficit. Estimates of the standardized-employment deficit and its revenue and outlay components for fiscal years 1956 through 1997 are reported in Tables E-1 through E-3, along with estimates of potential gross domestic product (GDP), actual GDP, and the nonaccelerating inflation rate of unemployment (NAIRU). The standardized-employment deficit and its components are also shown as a percentage of potential GDP.

As discussed in Chapter 1, the change in the standardized-employment deficit is a commonly used measure of the short-term impact of discretionary fiscal policy on total demand. The standardized-employment deficit, which is often called the structural deficit, excludes the effects on revenues and outlays of cyclical fluctuations in output and unemployment. More specifically, standardized-employment revenues are the federal revenues that would be collected if the economy was operating at its potential level of GDP. Those revenues are greater than actual revenues when GDP is below its potential level, because the tax bases are then cyclically depressed. Standardized-employment outlays are the federal outlays that would be recorded if the economy was operating at an unemployment rate consistent with stable inflation—the NAIRU, which is also the benchmark used to compute potential GDP. Standardized outlays are less than actual outlays when the rate of unemployment is higher than the NAIRU, because transfer payments for unemployment insurance and other programs are then cyclically swollen. The historical estimates differ from those reported a year ago because of slight revisions to the historical estimates of potential GDP.

Budget data consistent with the budget projections in Chapters 2, 3, and 4 are available for fiscal years 1962 through 1997 and are reported in Tables E-4 through E-13. The data are shown both in nominal dollars and as a percentage of gross domestic product. Data for 1997 are from Department of the Treasury, *Final Monthly Treasury Statement*, Fiscal Year 1997 (October 1997), as revised by subsequent monthly statements.

Federal revenues, outlays, deficit or surplus, and debt held by the public are shown in Tables E-4 and E-5. Revenues, outlays, and the deficit have both on-budget and off-budget components. Social Security receipts and outlays were placed off-budget by the Deficit Control Act of 1985; the Postal Service was moved off-budget, beginning in 1989, by the Omnibus Budget Reconciliation Act of 1989.

The major sources of federal revenues (including off-budget revenues) are presented in Tables E-6 and E-7. Social insurance taxes and contributions include employer and employee payments for Social Security, Medicare, Railroad Retirement, and unemployment insurance, as well as pension contributions by federal workers. Excise taxes are levied on certain products and services such as gasoline, alcoholic beverages, and air travel. Miscellaneous receipts consist of deposits of earnings by the Federal Reserve System and numerous fees and charges.

Total on- and off-budget outlays for major spending categories are shown in Tables E-8 and E-9. In order to compare historical outlays with the projections discussed in Chapters 2, 3, and 4, the historical data

have been divided into the same categories of spending as the projections. Spending controlled by the appropriation process is classified as discretionary. Tables E-10 and E-11 divide discretionary spending into its defense, international, and domestic components. Entitlements and other mandatory spending include programs for which spending is governed by laws making those who meet certain requirements eligible to receive payments. Additional detail on entitlement programs is

shown in Tables E-12 and E-13. Net interest is identical to the budget function with the same name (function 900). Offsetting receipts include the federal government's contribution toward employee retirement, fees and charges such as Medicare premiums, and receipts from the use of federally controlled land and offshore territory.

Table E-1.
Deficits, Surpluses, Debt, and Related Series, Fiscal Years 1956-1997

	In Billions of Dollars			As a Percentage of GDP			GDP (Billions of dollars)		NAIRU ^d (Percent)
	Deficit (-) or Surplus	Standardized- Employment Deficit (-) or Surplus ^a	Debt Held by the Public	Deficit (-) or Surplus	Standardized- Employment Deficit (-) or Surplus ^{a,b}	Debt Held by the Public	Actual ^c	Potential	
1956	4	e	222	0.9	-0.1	52.0	427	415	5.5
1957	3	1	219	0.8	0.1	48.7	451	444	5.5
1958	-3	1	226	-0.6	0.1	49.3	459	471	5.5
1959	-13	-11	235	-2.6	-2.1	47.9	490	497	5.5
1960	e	e	237	0.1	0.1	45.6	519	520	5.5
1961	-3	3	238	-0.6	0.5	45.0	530	548	5.6
1962	-7	-5	248	-1.3	-0.8	43.7	568	576	5.6
1963	-5	-3	254	-0.8	-0.5	42.4	599	607	5.6
1964	-6	-7	257	-0.9	-1.1	40.1	641	639	5.6
1965	-1	-5	261	-0.2	-0.8	38.0	687	671	5.7
1966	-4	-15	264	-0.5	-2.1	34.9	756	722	5.8
1967	-9	-20	267	-1.1	-2.6	32.9	810	777	5.8
1968	-25	-36	290	-2.9	-4.3	33.3	870	842	5.8
1969	3	-10	278	0.3	-1.1	29.3	948	916	5.9
1970	-3	-9	283	-0.3	-0.9	28.1	1,010	1,001	5.9
1971	-23	-20	303	-2.1	-1.8	28.1	1,078	1,090	5.9
1972	-23	-23	322	-2.0	-1.9	27.4	1,175	1,181	6.0
1973	-15	-27	341	-1.1	-2.1	26.0	1,310	1,275	6.1
1974	-6	-16	344	-0.4	-1.1	23.9	1,438	1,416	6.2
1975	-53	-35	395	-3.4	-2.2	25.4	1,554	1,614	6.2
1976	-74	-51	477	-4.3	-2.9	27.6	1,733	1,785	6.2
1977	-54	-44	549	-2.7	-2.2	27.8	1,972	1,996	6.2
1978	-59	-62	607	-2.7	-2.8	27.4	2,214	2,208	6.3
1979	-41	-53	640	-1.6	-2.1	25.6	2,498	2,473	6.3
1980	-74	-57	710	-2.7	-2.1	26.1	2,719	2,777	6.3
1981	-79	-52	785	-2.6	-1.7	25.8	3,048	3,132	6.2
1982	-128	-67	920	-4.0	-1.9	28.6	3,214	3,432	6.2
1983	-208	-126	1,132	-6.1	-3.4	33.1	3,422	3,670	6.1
1984	-185	-160	1,300	-4.9	-4.1	34.0	3,820	3,905	6.1
1985	-212	-201	1,500	-5.2	-4.8	36.5	4,108	4,148	6.1
1986	-221	-212	1,737	-5.1	-4.8	39.8	4,368	4,387	6.0
1987	-150	-138	1,889	-3.2	-3.0	41.0	4,609	4,642	6.0
1988	-155	-151	2,051	-3.1	-3.1	41.4	4,957	4,935	6.0
1989	-152	-154	2,190	-2.8	-2.9	40.9	5,356	5,280	6.0
1990	-221	-182	2,411	-3.9	-3.2	42.4	5,683	5,635	6.0
1991	-269	-203	2,688	-4.6	-3.4	45.9	5,862	6,005	5.9
1992	-290	-235	2,999	-4.7	-3.7	48.8	6,149	6,300	5.9
1993	-255	-240	3,247	-3.9	-3.7	50.1	6,478	6,588	5.9
1994	-203	-194	3,432	-3.0	-2.8	50.2	6,849	6,877	5.8
1995	-164	-190	3,603	-2.3	-2.6	50.1	7,194	7,203	5.8
1996	-107	-123	3,733	-1.4	-1.6	49.9	7,533	7,534	5.8
1997	-22	-80	3,771	-0.3	-1.0	47.3	7,972	7,872	5.8

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

a. Excludes deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

b. Shown as a percentage of potential GDP.

c. Values for 1956 through 1960 are estimated by CBO.

d. The NAIRU is the nonaccelerating inflation rate of unemployment. It is the benchmark for computing potential GDP.

e. Less than \$500 million.

Table E-2.
Standardized-Employment Deficit or Surplus and Related Series,
Fiscal Years 1956-1997 (In billions of dollars)

	Budget Deficit (-) or Surplus	Cyclical Deficit (-) or Surplus	Other Adjustments ^a	Standardized-Employment		
				Deficit (-) or Surplus	Revenues	Outlays
1956	4	-4	0	b	71	71
1957	3	-3	0	1	78	77
1958	-3	3	0	1	83	82
1959	-13	2	0	-11	81	91
1960	b	b	0	b	93	92
1961	-3	6	0	3	100	97
1962	-7	3	b	-5	102	107
1963	-5	2	b	-3	109	112
1964	-6	-1	b	-7	112	119
1965	-1	-4	b	-5	114	119
1966	-4	-11	b	-15	122	137
1967	-9	-11	b	-20	140	160
1968	-25	-10	-1	-36	145	181
1969	3	-13	-1	-10	177	188
1970	-3	-5	-1	-9	190	199
1971	-23	3	b	-20	190	210
1972	-23	1	-1	-23	209	232
1973	-15	-12	-1	-27	221	249
1974	-6	-9	-1	-16	256	273
1975	-53	18	1	-35	293	328
1976	-74	23	-1	-51	312	364
1977	-54	11	-2	-44	363	407
1978	-59	-2	-1	-62	398	460
1979	-41	-9	-3	-53	456	509
1980	-74	17	b	-57	531	588
1981	-79	28	-1	-52	623	675
1982	-128	64	-2	-67	670	736
1983	-208	81	1	-126	661	788
1984	-185	28	-3	-160	690	850
1985	-212	14	-2	-201	744	945
1986	-221	8	2	-212	774	987
1987	-150	8	3	-138	864	1,002
1988	-155	-8	12	-151	904	1,055
1989	-152	-24	22	-154	970	1,125
1990	-221	-16	55	-182	1,017	1,199
1991	-269	44	23	-203	1,091	1,294
1992	-290	58	-2	-235	1,134	1,369
1993	-255	43	-28	-240	1,186	1,427
1994	-203	13	-3	-194	1,269	1,463
1995	-164	-2	-25	-190	1,354	1,545
1996	-107	-2	-14	-123	1,454	1,577
1997	-22	-34	-24	-80	1,551	1,631

SOURCE: Congressional Budget Office.

a. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

b. Less than \$500 million.

Table E-3.
Standardized-Employment Deficit or Surplus and Related Series,
Fiscal Years 1956-1997 (As a percentage of potential GDP)

	Budget Deficit (-) or Surplus ^a	Cyclical Deficit (-) or Surplus	Other Adjustments ^b	Standardized-Employment		
				Deficit (-) or Surplus	Revenues	Outlays
1956	0.9	-1.1	0	-0.1	17.1	17.2
1957	0.8	-0.6	0	0.1	17.6	17.4
1958	-0.6	0.7	0	0.1	17.6	17.4
1959	-2.6	0.5	0	-2.1	16.3	18.4
1960	0.1	c	0	0.1	17.8	17.8
1961	-0.6	1.1	0	0.5	18.2	17.7
1962	-1.3	0.5	-0.1	-0.8	17.7	18.5
1963	-0.8	0.4	-0.1	-0.5	17.9	18.4
1964	-0.9	-0.1	-0.1	-1.1	17.5	18.6
1965	-0.2	-0.5	-0.1	-0.8	16.9	17.7
1966	-0.5	-1.5	-0.1	-2.1	16.9	19.0
1967	-1.1	-1.4	-0.1	-2.6	18.0	20.6
1968	-2.9	-1.2	-0.1	-4.3	17.3	21.5
1969	0.3	-1.4	-0.1	-1.1	19.4	20.5
1970	-0.3	-0.5	-0.1	-0.9	19.0	19.9
1971	-2.1	0.3	c	-1.8	17.5	19.3
1972	-2.0	0.1	-0.1	-1.9	17.7	19.6
1973	-1.1	-0.9	-0.1	-2.1	17.4	19.5
1974	-0.4	-0.7	c	-1.1	18.1	19.3
1975	-3.4	1.1	c	-2.2	18.2	20.3
1976	-4.3	1.3	c	-2.9	17.5	20.4
1977	-2.7	0.6	-0.1	-2.2	18.2	20.4
1978	-2.7	-0.1	c	-2.8	18.0	20.8
1979	-1.6	-0.4	-0.1	-2.1	18.5	20.6
1980	-2.7	0.6	c	-2.1	19.1	21.2
1981	-2.6	0.9	c	-1.7	19.9	21.6
1982	-4.0	1.9	-0.1	-1.9	19.5	21.5
1983	-6.1	2.2	c	-3.4	18.0	21.5
1984	-4.9	0.7	-0.1	-4.1	17.7	21.8
1985	-5.2	0.3	-0.1	-4.8	17.9	22.8
1986	-5.1	0.2	c	-4.8	17.7	22.5
1987	-3.2	0.2	0.1	-3.0	18.6	21.6
1988	-3.1	-0.2	0.2	-3.1	18.3	21.4
1989	-2.8	-0.5	0.4	-2.9	18.4	21.3
1990	-3.9	-0.3	1	-3.2	18.1	21.3
1991	-4.6	0.7	0.4	-3.4	18.2	21.5
1992	-4.7	0.9	c	-3.7	18.0	21.7
1993	-3.9	0.6	-0.4	-3.7	18.0	21.7
1994	-3.0	0.2	c	-2.8	18.5	21.3
1995	-2.3	c	-0.3	-2.6	18.8	21.4
1996	-1.4	c	-0.2	-1.6	19.3	20.9
1997	-0.3	-0.4	-0.3	-1.0	19.7	20.7

SOURCE: Congressional Budget Office.

a. Shown as a percentage of actual GDP.

b. Consists of deposit insurance, receipts from auctions of the electromagnetic spectrum, timing adjustments, and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

c. Less than 0.05 percent.

Table E-4.
Revenues, Outlays, Deficits, Surpluses, and Debt Held by the Public,
Fiscal Years 1962-1997 (In billions of dollars)

	Revenues	Outlays	Deficit (-) or Surplus			Total	Debt Held by the Public ^a
			On-Budget	Social Security	Postal Service		
1962	99.7	106.8	-5.9	-1.3	b	-7.1	248.0
1963	106.6	111.3	-4.0	-0.8	b	-4.8	254.0
1964	112.6	118.5	-6.5	0.6	b	-5.9	256.8
1965	116.8	118.2	-1.6	0.2	b	-1.4	260.8
1966	130.8	134.5	-3.1	-0.6	b	-3.7	263.7
1967	148.8	157.5	-12.6	4.0	b	-8.6	266.6
1968	153.0	178.1	-27.7	2.6	b	-25.2	289.5
1969	186.9	183.6	-0.5	3.7	b	3.2	278.1
1970	192.8	195.6	-8.7	5.9	b	-2.8	283.2
1971	187.1	210.2	-26.1	3.0	b	-23.0	303.0
1972	207.3	230.7	-26.4	3.0	b	-23.4	322.4
1973	230.8	245.7	-15.4	0.5	b	-14.9	340.9
1974	263.2	269.4	-8.0	1.8	b	-6.1	343.7
1975	279.1	332.3	-55.3	2.0	b	-53.2	394.7
1976	298.1	371.8	-70.5	-3.2	b	-73.7	477.4
1977	355.6	409.2	-49.8	-3.9	b	-53.7	549.1
1978	399.6	458.7	-54.9	-4.3	b	-59.2	607.1
1979	463.3	504.0	-38.7	-2.0	b	-40.7	640.3
1980	517.1	590.9	-72.7	-1.1	b	-73.8	709.8
1981	599.3	678.2	-74.0	-5.0	b	-79.0	785.3
1982	617.8	745.8	-120.1	-7.9	b	-128.0	919.8
1983	600.6	808.4	-208.0	0.2	b	-207.8	1,131.6
1984	666.5	851.9	-185.7	0.3	b	-185.4	1,300.5
1985	734.1	946.4	-221.7	9.4	b	-212.3	1,499.9
1986	769.2	990.5	-238.0	16.7	b	-221.2	1,736.7
1987	854.4	1,004.1	-169.3	19.6	b	-149.8	1,888.7
1988	909.3	1,064.5	-194.0	38.8	b	-155.2	2,050.8
1989	991.2	1,143.7	-205.2	52.4	0.3	-152.5	2,189.9
1990	1,032.0	1,253.2	-277.8	58.2	-1.6	-221.2	2,410.7
1991	1,055.0	1,324.4	-321.6	53.5	-1.3	-269.4	2,688.1
1992	1,091.3	1,381.7	-340.5	50.7	-0.7	-290.4	2,998.8
1993	1,154.4	1,409.4	-300.4	46.8	-1.4	-255.1	3,247.5
1994	1,258.6	1,461.7	-258.8	56.8	-1.1	-203.1	3,432.1
1995	1,351.8	1,515.7	-226.3	60.4	2.0	-163.9	3,603.4
1996	1,453.1	1,560.5	-174.0	66.4	0.2	-107.4	3,733.0
1997	1,579.0	1,600.9	-103.3	81.3	c	-22.0	3,771.1

SOURCE: Congressional Budget Office.

a. End of year.

b. In fiscal years 1962 through 1988, the Postal Service was on-budget and included in the on-budget total.

c. Less than \$500 million.

Table E-5.
Revenues, Outlays, Deficits, Surpluses, and Debt Held by the Public,
Fiscal Years 1962-1997 (As a percentage of GDP)

	Revenues	Outlays	Deficit (-) or Surplus			Total	Debt Held by the Public ^a
			On-Budget	Social Security	Postal Service		
1962	17.6	18.8	-1.0	-0.2	b	-1.3	43.7
1963	17.8	18.6	-0.7	-0.1	b	-0.8	42.4
1964	17.6	18.5	-1.0	0.1	b	-0.9	40.1
1965	17.0	17.2	-0.2	c	b	-0.2	38.0
1966	17.3	17.8	-0.4	-0.1	b	-0.5	34.9
1967	18.4	19.4	-1.6	0.5	b	-1.1	32.9
1968	17.6	20.5	-3.2	0.3	b	-2.9	33.3
1969	19.7	19.4	-0.1	0.4	b	0.3	29.3
1970	19.1	19.4	-0.9	0.6	b	-0.3	28.1
1971	17.4	19.5	-2.4	0.3	b	-2.1	28.1
1972	17.6	19.6	-2.2	0.3	b	-2.0	27.4
1973	17.6	18.8	-1.2	c	b	-1.1	26.0
1974	18.3	18.7	-0.6	0.1	b	-0.4	23.9
1975	18.0	21.4	-3.6	0.1	b	-3.4	25.4
1976	17.2	21.5	-4.1	-0.2	b	-4.3	27.6
1977	18.0	20.8	-2.5	-0.2	b	-2.7	27.8
1978	18.0	20.7	-2.5	-0.2	b	-2.7	27.4
1979	18.6	20.2	-1.6	-0.1	b	-1.6	25.6
1980	19.0	21.7	-2.7	c	b	-2.7	26.1
1981	19.7	22.3	-2.4	-0.2	b	-2.6	25.8
1982	19.2	23.2	-3.7	-0.2	b	-4.0	28.6
1983	17.5	23.6	-6.1	c	b	-6.1	33.1
1984	17.5	22.3	-4.9	c	b	-4.9	34.0
1985	17.9	23.0	-5.4	0.2	b	-5.2	36.5
1986	17.6	22.7	-5.4	0.4	b	-5.1	39.8
1987	18.5	21.8	-3.7	0.4	b	-3.2	41.0
1988	18.3	21.5	-3.9	0.8	b	-3.1	41.4
1989	18.5	21.4	-3.8	1.0	c	-2.8	40.9
1990	18.2	22.1	-4.9	1.0	c	-3.9	42.4
1991	18.0	22.6	-5.5	0.9	c	-4.6	45.9
1992	17.7	22.5	-5.5	0.8	c	-4.7	48.8
1993	17.8	21.8	-4.6	0.7	c	-3.9	50.1
1994	18.4	21.3	-3.8	0.8	c	-3.0	50.1
1995	18.8	21.1	-3.1	0.8	c	-2.3	50.1
1996	19.3	20.7	-2.3	0.9	c	-1.4	49.6
1997	19.8	20.1	-1.3	1.0	c	-0.3	47.3

SOURCE: Congressional Budget Office.

a. End of year.

b. In fiscal years 1962 through 1988, the Postal Service was on-budget and included in the on-budget total.

c. Less than 0.05 percent.

Table E-6.
Revenues by Major Source, Fiscal Years 1962-1997 (In billions of dollars)

	Individual Income Taxes	Corporate Income Taxes	Social Insurance Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscel- laneous Receipts	Total Revenues
1962	45.6	20.5	17.0	12.5	2.0	1.1	0.8	99.7
1963	47.6	21.6	19.8	13.2	2.2	1.2	1.0	106.6
1964	48.7	23.5	22.0	13.7	2.4	1.3	1.1	112.6
1965	48.8	25.5	22.2	14.6	2.7	1.4	1.6	116.8
1966	55.4	30.1	25.5	13.1	3.1	1.8	1.9	130.8
1967	61.5	34.0	32.6	13.7	3.0	1.9	2.1	148.8
1968	68.7	28.7	33.9	14.1	3.1	2.0	2.5	153.0
1969	87.2	36.7	39.0	15.2	3.5	2.3	2.9	186.9
1970	90.4	32.8	44.4	15.7	3.6	2.4	3.4	192.8
1971	86.2	26.8	47.3	16.6	3.7	2.6	3.9	187.1
1972	94.7	32.2	52.6	15.5	5.4	3.3	3.6	207.3
1973	103.2	36.2	63.1	16.3	4.9	3.2	3.9	230.8
1974	119.0	38.6	75.1	16.8	5.0	3.3	5.4	263.2
1975	122.4	40.6	84.5	16.6	4.6	3.7	6.7	279.1
1976	131.6	41.4	90.8	17.0	5.2	4.1	8.0	298.1
1977	157.6	54.9	106.5	17.5	7.3	5.2	6.5	355.6
1978	181.0	60.0	121.0	18.4	5.3	6.6	7.4	399.6
1979	217.8	65.7	138.9	18.7	5.4	7.4	9.3	463.3
1980	244.1	64.6	157.8	24.3	6.4	7.2	12.7	517.1
1981	285.9	61.1	182.7	40.8	6.8	8.1	13.8	599.3
1982	297.7	49.2	201.5	36.3	8.0	8.9	16.2	617.8
1983	288.9	37.0	209.0	35.3	6.1	8.7	15.6	600.6
1984	298.4	56.9	239.4	37.4	6.0	11.4	17.1	666.5
1985	334.5	61.3	265.2	36.0	6.4	12.1	18.6	734.1
1986	349.0	63.1	283.9	32.9	7.0	13.3	20.0	769.2
1987	392.6	83.9	303.3	32.5	7.5	15.1	19.5	854.4
1988	401.2	94.5	334.3	35.2	7.6	16.2	20.3	909.3
1989	445.7	103.3	359.4	34.4	8.7	16.3	23.3	991.2
1990	466.9	93.5	380.0	35.3	11.5	16.7	28.0	1,032.0
1991	467.8	98.1	396.0	42.4	11.1	15.9	23.6	1,055.0
1992	476.0	100.3	413.7	45.6	11.1	17.4	27.3	1,091.3
1993	509.7	117.5	428.3	48.1	12.6	18.8	19.5	1,154.4
1994	543.1	140.4	461.5	55.2	15.2	20.1	23.2	1,258.6
1995	590.2	157.0	484.5	57.5	14.8	19.3	28.6	1,351.8
1996	656.4	171.8	509.4	54.0	17.2	18.7	25.5	1,453.1
1997	737.5	182.3	539.4	56.9	19.8	17.9	25.1	1,579.0

SOURCE: Congressional Budget Office.

Table E-7.
Revenues by Major Source, Fiscal Years 1962-1997 (As a percentage of GDP)

	Individual Income Taxes	Corporate Income Taxes	Social Insurance Taxes	Excise Taxes	Estate and Gift Taxes	Customs Duties	Miscel- laneous Receipts	Total Revenues
1962	8.0	3.6	3.0	2.2	0.4	0.2	0.1	17.6
1963	7.9	3.6	3.3	2.2	0.4	0.2	0.2	17.8
1964	7.6	3.7	3.4	2.1	0.4	0.2	0.2	17.6
1965	7.1	3.7	3.2	2.1	0.4	0.2	0.2	17.0
1966	7.3	4.0	3.4	1.7	0.4	0.2	0.2	17.3
1967	7.6	4.2	4.0	1.7	0.4	0.2	0.3	18.4
1968	7.9	3.3	3.9	1.6	0.4	0.2	0.3	17.6
1969	9.2	3.9	4.1	1.6	0.4	0.2	0.3	19.7
1970	9.0	3.3	4.4	1.6	0.4	0.2	0.3	19.1
1971	8.0	2.5	4.4	1.5	0.3	0.2	0.4	17.4
1972	8.1	2.7	4.5	1.3	0.5	0.3	0.3	17.6
1973	7.9	2.8	4.8	1.2	0.4	0.2	0.3	17.6
1974	8.3	2.7	5.2	1.2	0.4	0.2	0.4	18.3
1975	7.9	2.6	5.4	1.1	0.3	0.2	0.4	18.0
1976	7.6	2.4	5.2	1.0	0.3	0.2	0.5	17.2
1977	8.0	2.8	5.4	0.9	0.4	0.3	0.3	18.0
1978	8.2	2.7	5.5	0.8	0.2	0.3	0.3	18.0
1979	8.7	2.6	5.6	0.8	0.2	0.3	0.4	18.6
1980	9.0	2.4	5.8	0.9	0.2	0.3	0.5	19.0
1981	9.4	2.0	6.0	1.3	0.2	0.3	0.5	19.7
1982	9.3	1.5	6.3	1.1	0.2	0.3	0.5	19.2
1983	8.4	1.1	6.1	1.0	0.2	0.3	0.5	17.5
1984	7.8	1.5	6.3	1.0	0.2	0.3	0.4	17.5
1985	8.1	1.5	6.5	0.9	0.2	0.3	0.5	17.9
1986	8.0	1.4	6.5	0.8	0.2	0.3	0.5	17.6
1987	8.5	1.8	6.6	0.7	0.2	0.3	0.4	18.5
1988	8.1	1.9	6.7	0.7	0.2	0.3	0.4	18.3
1989	8.3	1.9	6.7	0.6	0.2	0.3	0.4	18.5
1990	8.2	1.6	6.7	0.6	0.2	0.3	0.5	18.2
1991	8.0	1.7	6.8	0.7	0.2	0.3	0.4	18.0
1992	7.7	1.6	6.7	0.7	0.2	0.3	0.4	17.7
1993	7.9	1.8	6.6	0.7	0.2	0.3	0.3	17.8
1994	7.9	2.0	6.7	0.8	0.2	0.3	0.3	18.4
1995	8.2	2.2	6.7	0.8	0.2	0.3	0.4	18.8
1996	8.7	2.3	6.8	0.7	0.2	0.2	0.3	19.3
1997	9.3	2.3	6.8	0.7	0.2	0.2	0.3	19.8

SOURCE: Congressional Budget Office.

Table E-8.
Outlays for Major Spending Categories, Fiscal Years 1962-1997 (In billions of dollars)

	Discretionary Spending	Entitlements and Other Mandatory Spending	Net Interest	Offsetting Receipts	Total Outlays
1962	72.1	34.7	6.9	-6.8	106.8
1963	75.3	36.2	7.7	-7.9	111.3
1964	79.1	38.9	8.2	-7.7	118.5
1965	77.8	39.7	8.6	-7.9	118.2
1966	90.1	43.4	9.4	-8.4	134.5
1967	106.4	50.9	10.3	-10.2	157.5
1968	117.9	59.7	11.1	-10.6	178.1
1969	117.3	64.7	12.7	-11.0	183.6
1970	120.2	72.6	14.4	-11.5	195.6
1971	122.5	86.9	14.8	-14.1	210.2
1972	128.4	100.9	15.5	-14.1	230.7
1973	130.2	116.1	17.3	-18.0	245.7
1974	138.1	131.0	21.4	-21.2	269.4
1975	157.8	169.6	23.2	-18.3	332.3
1976	175.3	189.4	26.7	-19.6	371.8
1977	196.8	204.0	29.9	-21.5	409.2
1978	218.5	227.7	35.5	-22.8	458.7
1979	239.7	247.3	42.6	-25.6	504.0
1980	276.1	291.5	52.5	-29.2	590.9
1981	307.8	339.6	68.8	-37.9	678.2
1982	325.8	370.9	85.0	-36.0	745.8
1983	353.1	410.7	89.8	-45.3	808.4
1984	379.2	405.8	111.1	-44.2	851.9
1985	415.7	448.4	129.5	-47.1	946.4
1986	438.3	462.0	136.0	-45.9	990.5
1987	444.0	474.4	138.7	-52.9	1,004.1
1988	464.2	505.3	151.8	-56.8	1,064.5
1989	488.6	549.6	169.3	-63.8	1,143.7
1990	500.3	627.3	184.2	-58.7	1,253.2
1991	533.0	702.6	194.5	-105.7	1,324.4
1992	534.0	716.6	199.4	-68.4	1,381.7
1993	540.4	736.8	198.8	-66.6	1,409.4
1994	543.3	784.0	203.0	-68.5	1,461.7
1995	545.1	818.2	232.2	-79.7	1,515.7
1996	533.8	857.5	241.1	-71.9	1,560.5
1997	548.5	894.6	244.1	-86.2	1,600.9

SOURCE: Congressional Budget Office.

Table E-9.
Outlays for Major Spending Categories, Fiscal Years 1962-1997 (As a percentage of GDP)

	Discretionary Spending	Entitlements and Other Mandatory Spending	Net Interest	Offsetting Receipts	Total Outlays
1962	12.7	6.1	1.2	-1.2	18.8
1963	12.6	6.0	1.3	-1.3	18.6
1964	12.3	6.1	1.3	-1.2	18.5
1965	11.3	5.8	1.3	-1.1	17.2
1966	11.9	5.7	1.2	-1.1	17.8
1967	13.1	6.3	1.3	-1.3	19.4
1968	13.6	6.9	1.3	-1.2	20.5
1969	12.4	6.8	1.3	-1.2	19.4
1970	11.9	7.2	1.4	-1.1	19.4
1971	11.4	8.1	1.4	-1.3	19.5
1972	10.9	8.6	1.3	-1.2	19.6
1973	9.9	8.9	1.3	-1.4	18.8
1974	9.6	9.1	1.5	-1.5	18.7
1975	10.2	10.9	1.5	-1.2	21.4
1976	10.1	10.9	1.5	-1.1	21.5
1977	10.0	10.4	1.5	-1.1	20.8
1978	9.9	10.3	1.6	-1.0	20.7
1979	9.6	9.9	1.7	-1.0	20.2
1980	10.2	10.7	1.9	-1.1	21.7
1981	10.1	11.1	2.3	-1.2	22.3
1982	10.1	11.5	2.6	-1.1	23.2
1983	10.3	12.0	2.6	-1.3	23.6
1984	9.9	10.6	2.9	-1.2	22.3
1985	10.1	10.9	3.2	-1.1	23.0
1986	10.0	10.6	3.1	-1.1	22.7
1987	9.6	10.3	3.0	-1.1	21.8
1988	9.4	10.2	3.1	-1.1	21.5
1989	9.1	10.3	3.2	-1.2	21.4
1990	8.8	11.0	3.2	-1.0	22.1
1991	9.1	12.0	3.3	-1.8	22.6
1992	8.7	11.7	3.2	-1.1	22.5
1993	8.3	11.4	3.1	-1.0	21.8
1994	7.9	11.4	3.0	-1.0	21.3
1995	7.6	11.4	3.2	-1.1	21.1
1996	7.1	11.4	3.2	-1.0	20.7
1997	6.9	11.2	3.1	-1.1	20.1

SOURCE: Congressional Budget Office.

Table E-10.
Discretionary Outlays, Fiscal Years 1962-1997 (In billions of dollars)

	Defense	International	Domestic	Total
1962	52.6	5.5	14.0	72.1
1963	53.7	5.2	16.3	75.3
1964	55.0	4.6	19.5	79.1
1965	51.0	4.7	22.1	77.8
1966	59.0	5.1	26.1	90.1
1967	72.0	5.3	29.1	106.4
1968	82.2	4.9	30.9	117.9
1969	82.7	4.1	30.5	117.3
1970	81.9	4.0	34.3	120.2
1971	79.0	3.8	39.7	122.5
1972	79.3	4.6	44.5	128.4
1973	77.1	4.8	48.3	130.2
1974	80.7	6.2	51.1	138.1
1975	87.6	8.2	62.0	157.8
1976	89.9	7.5	77.9	175.3
1977	97.5	8.0	91.3	196.8
1978	104.6	8.5	105.3	218.5
1979	116.8	9.1	113.8	239.7
1980	134.6	12.8	128.7	276.1
1981	158.0	13.6	136.1	307.8
1982	185.9	12.9	127.0	325.8
1983	209.9	13.6	129.7	353.1
1984	228.0	16.3	134.9	379.2
1985	253.1	17.4	145.2	415.7
1986	273.8	17.7	146.8	438.3
1987	282.5	15.2	146.2	444.0
1988	290.9	15.7	157.5	464.2
1989	304.0	16.6	167.9	488.6
1990	300.1	19.1	181.1	500.3
1991	319.7	19.7	193.6	533.0
1992	302.6	19.2	212.3	534.0
1993	292.4	21.6	226.4	540.4
1994	282.3	20.8	240.2	543.3
1995	273.6	20.1	251.4	545.1
1996	266.0	18.3	249.5	533.8
1997	271.9	19.8	256.9	548.5

SOURCE: Congressional Budget Office.

Table E-11.
Discretionary Outlays, Fiscal Years 1962-1997 (As a percentage of GDP)

	Defense	International	Domestic	Total
1962	9.3	1.0	2.5	12.7
1963	9.0	0.9	2.7	12.6
1964	8.6	0.7	3.0	12.3
1965	7.4	0.7	3.2	11.3
1966	7.8	0.7	3.4	11.9
1967	8.9	0.7	3.6	13.1
1968	9.4	0.6	3.6	13.6
1969	8.7	0.4	3.2	12.4
1970	8.1	0.4	3.4	11.9
1971	7.3	0.3	3.7	11.4
1972	6.7	0.4	3.8	10.9
1973	5.9	0.4	3.7	9.9
1974	5.6	0.4	3.6	9.6
1975	5.6	0.5	4.0	10.2
1976	5.2	0.4	4.5	10.1
1977	4.9	0.4	4.6	10.0
1978	4.7	0.4	4.8	9.9
1979	4.7	0.4	4.6	9.6
1980	5.0	0.5	4.7	10.2
1981	5.2	0.4	4.5	10.1
1982	5.8	0.4	4.0	10.1
1983	6.1	0.4	3.8	10.3
1984	6.0	0.4	3.5	9.9
1985	6.2	0.4	3.5	10.1
1986	6.3	0.4	3.4	10.0
1987	6.1	0.3	3.2	9.6
1988	5.9	0.3	3.2	9.4
1989	5.7	0.3	3.1	9.1
1990	5.3	0.3	3.2	8.8
1991	5.5	0.3	3.3	9.1
1992	4.9	0.3	3.5	8.7
1993	4.5	0.3	3.5	8.3
1994	4.1	0.3	3.5	7.9
1995	3.8	0.3	3.5	7.6
1996	3.5	0.2	3.3	7.1
1997	3.4	0.2	3.2	6.9

SOURCE: Congressional Budget Office.

Table E-12.
Outlays for Entitlements and Other Mandatory Spending,
Fiscal Years 1962-1997 (In billions of dollars)

	Means-Tested Programs			Non-Means-Tested Programs							Total Non-Means-Tested Programs	Total Entitlements and Other Mandatory Spending
	Medicaid	Other	Total Means-Tested	Social Security	Medicare	Other Retirement and Disability	Unemployment Compensation	Farm Price Supports	Deposit Insurance	Other		
1962	0.1	4.2	4.3	14.0	0	2.7	3.5	2.4	-0.4	8.2	30.4	34.7
1963	0.2	4.5	4.7	15.5	0	2.9	3.6	3.4	-0.4	6.6	31.5	36.2
1964	0.2	4.8	5.0	16.2	0	3.3	3.4	3.4	-0.4	8.0	33.9	38.9
1965	0.3	4.9	5.2	17.1	0	3.6	2.7	2.8	-0.4	8.7	34.5	39.7
1966	0.8	5.0	5.8	20.3	a	4.1	2.2	1.4	-0.5	10.1	37.6	43.4
1967	1.2	5.0	6.2	21.3	3.2	4.8	2.3	2.0	-0.4	11.6	44.7	50.9
1968	1.8	5.7	7.5	23.3	5.1	5.7	2.2	3.3	-0.5	13.2	52.2	59.7
1969	2.3	6.3	8.6	26.7	6.3	5.2	2.3	4.2	-0.6	11.9	56.1	64.7
1970	2.7	7.4	10.1	29.6	6.8	6.6	3.1	3.8	-0.5	13.0	62.5	72.6
1971	3.4	10.0	13.4	35.1	7.5	8.3	5.8	2.9	-0.4	14.4	73.5	86.9
1972	4.6	11.7	16.3	39.4	8.4	9.6	6.7	4.1	-0.6	17.1	84.6	100.9
1973	4.6	11.4	16.0	48.2	9.0	11.7	4.9	3.6	-0.8	23.5	100.1	116.1
1974	5.8	13.7	19.5	55.0	10.7	13.8	5.6	1.0	-0.6	26.1	111.5	131.0
1975	6.8	18.6	25.4	63.6	14.1	18.3	12.8	0.6	0.5	34.3	144.2	169.6
1976	8.6	21.7	30.3	72.7	16.9	18.9	18.6	1.1	-0.6	31.5	159.1	189.4
1977	9.9	23.4	33.3	83.7	20.8	21.6	14.3	3.8	-2.8	29.3	170.7	204.0
1978	10.7	24.8	35.5	92.4	24.3	23.7	10.8	5.7	-1.0	36.2	192.2	227.7
1979	12.4	26.5	38.9	102.6	28.2	27.9	9.8	3.6	-1.7	38.2	208.4	247.3
1980	14.0	31.9	45.9	117.1	34.0	32.1	16.9	2.8	-0.4	43.2	245.6	291.5
1981	16.8	37.1	53.9	137.9	41.3	37.4	18.3	4.0	-1.4	48.2	285.7	339.6
1982	17.4	37.4	54.8	153.9	49.2	40.7	22.2	11.7	-2.1	40.5	316.1	370.9
1983	19.0	40.3	59.3	168.5	55.5	43.2	29.7	18.9	-1.2	36.8	351.4	410.7
1984	20.1	41.2	61.3	176.1	61.0	44.7	17.0	7.3	-0.8	39.3	344.5	405.8
1985	22.7	43.3	66.0	186.4	69.6	45.5	15.8	17.7	-2.2	49.4	382.4	448.4
1986	25.0	44.9	69.9	196.5	74.2	47.5	16.1	25.8	1.5	30.3	392.1	462.0
1987	27.4	45.5	72.9	205.1	79.9	50.8	15.5	22.4	3.1	24.8	401.5	474.4
1988	30.5	50.0	80.5	216.8	85.7	54.2	13.6	12.2	10.0	32.3	424.8	505.3
1989	34.6	54.2	88.8	230.4	94.3	57.2	13.9	10.6	22.0	32.4	460.8	549.6
1990	41.1	58.8	99.9	246.5	107.4	59.9	17.5	6.5	57.9	31.7	527.4	627.3
1991	52.5	69.7	122.2	266.8	114.2	64.4	25.1	10.1	66.2	33.6	580.4	702.6
1992	67.8	78.7	146.5	285.2	129.4	66.6	36.9	9.3	2.6	40.2	570.1	716.6
1993	75.8	86.5	162.3	302.0	143.1	68.7	35.4	15.6	-28.0	37.7	574.5	736.8
1994	82.0	95.0	177.0	316.9	159.5	72.1	26.4	9.9	-7.6	29.8	607.0	784.0
1995	89.1	101.5	190.6	333.3	177.1	75.2	21.3	5.8	-17.9	32.9	627.6	818.2
1996	92.0	104.2	196.2	347.1	191.3	77.3	22.4	5.0	-8.4	26.6	661.4	857.5
1997	95.6	107.2	202.8	362.3	207.9	80.5	20.6	5.8	-14.4	29.1	691.8	894.6

SOURCE: Congressional Budget Office.

a. Less than \$50 million.

Table E-13.
Outlays for Entitlements and Other Mandatory Spending,
Fiscal Years 1962-1997 (As a percentage of GDP)

	Means-Tested Programs			Non-Means-Tested Programs							Total Entitle-ments and Other Mandatory Spending	
	Medicaid	Other	Total Means-Tested	Social Security	Medicare	Other Retirement and Disability	Unemploy-ment Compen-sation	Farm Price Supports	Deposit Insur-ance	Other		Total Non-Means-Tested Programs
1962	a	0.7	0.8	2.5	0	0.5	0.6	0.4	-0.1	1.4	5.4	6.1
1963	a	0.8	0.8	2.6	0	0.5	0.6	0.6	-0.1	1.1	5.3	6.0
1964	a	0.7	0.8	2.5	0	0.5	0.5	0.5	-0.1	1.2	5.3	6.1
1965	a	0.7	0.8	2.5	0	0.5	0.4	0.4	-0.1	1.3	5.0	5.8
1966	0.1	0.7	0.8	2.7	a	0.5	0.3	0.2	-0.1	1.3	5.0	5.7
1967	0.1	0.6	0.8	2.6	0.4	0.6	0.3	0.2	a	1.4	5.5	6.3
1968	0.2	0.7	0.9	2.7	0.6	0.7	0.2	0.4	-0.1	1.5	6.0	6.9
1969	0.2	0.7	0.9	2.8	0.7	0.6	0.2	0.4	-0.1	1.3	5.9	6.8
1970	0.3	0.7	1.0	2.9	0.7	0.7	0.3	0.4	a	1.3	6.2	7.2
1971	0.3	0.9	1.2	3.3	0.7	0.8	0.5	0.3	a	1.3	6.8	8.1
1972	0.4	1.0	1.4	3.3	0.7	0.8	0.6	0.3	-0.1	1.5	7.2	8.6
1973	0.4	0.9	1.2	3.7	0.7	0.9	0.4	0.3	-0.1	1.8	7.6	8.9
1974	0.4	1.0	1.4	3.8	0.7	1.0	0.4	0.1	a	1.8	7.8	9.1
1975	0.4	1.2	1.6	4.1	0.9	1.2	0.8	a	a	2.2	9.3	10.9
1976	0.5	1.3	1.7	4.2	1.0	1.1	1.1	0.1	a	1.8	9.2	10.9
1977	0.5	1.2	1.7	4.2	1.1	1.1	0.7	0.2	-0.1	1.5	8.7	10.4
1978	0.5	1.1	1.6	4.2	1.1	1.1	0.5	0.3	a	1.6	8.7	10.3
1979	0.5	1.1	1.6	4.1	1.1	1.1	0.4	0.1	-0.1	1.5	8.3	9.9
1980	0.5	1.2	1.7	4.3	1.2	1.2	0.6	0.1	a	1.6	9.0	10.7
1981	0.6	1.2	1.8	4.5	1.4	1.2	0.6	0.1	a	1.6	9.4	11.1
1982	0.5	1.2	1.7	4.8	1.5	1.3	0.7	0.4	-0.1	1.3	9.8	11.5
1983	0.6	1.2	1.7	4.9	1.6	1.3	0.9	1.6	a	1.1	10.3	12.0
1984	0.5	1.1	1.6	4.6	1.6	1.2	0.4	0.2	a	1.0	9.0	10.6
1985	0.6	1.1	1.6	4.5	1.7	1.1	0.4	0.4	-0.1	1.2	9.3	10.9
1986	0.6	1.0	1.6	4.5	1.7	1.1	0.4	0.6	a	0.7	9.0	10.6
1987	0.6	1.0	1.6	4.5	1.7	1.1	0.3	0.5	0.1	0.5	8.7	10.3
1988	0.6	1.0	1.6	4.4	1.7	1.1	0.3	0.2	0.2	0.7	8.6	10.2
1989	0.6	1.0	1.7	4.3	1.8	1.1	0.3	0.2	0.4	0.6	8.6	10.3
1990	0.7	1.0	1.8	4.3	1.9	1.1	0.3	0.1	1.0	0.6	9.3	11.0
1991	0.9	1.2	2.1	4.6	1.9	1.1	0.4	0.2	1.1	0.6	9.9	12.0
1992	1.1	1.3	2.4	4.6	2.1	1.1	0.6	0.2	a	0.7	9.3	11.7
1993	1.2	1.3	2.5	4.7	2.2	1.1	0.5	0.2	-0.4	0.6	8.9	11.4
1994	1.2	1.4	2.6	4.6	2.3	1.1	0.4	0.1	-0.1	0.4	8.9	11.4
1995	1.2	1.4	2.6	4.6	2.5	1.0	0.3	0.1	-0.2	0.5	8.7	11.4
1996	1.2	1.4	2.6	4.6	2.5	1.0	0.3	0.1	-0.1	0.4	8.8	11.4
1997	1.2	1.3	2.5	4.5	2.6	1.0	0.3	0.1	-0.2	0.4	8.7	11.2

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Medicare Projections

Gross Medicare outlays totaled \$208 billion in 1997, up about 9 percent from 1996. Assuming that the Congress makes no changes in current law, the Congressional Budget Office (CBO) projects that mandatory spending for Medicare, primarily for medical benefits, will increase to \$277 billion in 2002, an average annual increase of 5.9 percent (see Table F-1). Spending will reach \$448 billion in 2008, having risen at an average annual rate of 8.3 percent over the 2002-2008 period.

Because most Medicare beneficiaries pay a premium, Medicare's draw on the federal budget is less than its spending on benefits. Including the offsetting premiums, CBO projects that Medicare spending will increase from \$187 billion in 1997 to \$246 billion in 2002 and \$393 billion by 2008. Annual growth in that spending will jump from 5.6 percent between 1997 and 2002 to 8.1 percent between 2002 and 2008.

The Balanced Budget Act of 1997 will slow the growth of Medicare spending, especially between 1997 and 2002 (see Figure F-1). Despite that slowdown, however, CBO projects that Medicare outlays will continue to grow faster than overall federal outlays. Medicare's share of the federal budget will increase from under 12 percent in 1997 to 13 percent in 2002 and 16 percent by 2008 (see Figure F-2). Because Medicare spending probably will grow much faster than revenues after 2002, the new law represents only a down payment on changes needed to sustain the Medicare program over the long run.

The Balanced Budget Act will encourage enrollment in risk-based plans that contract with Medicare for the care of Medicare beneficiaries. The law also restrains the rate of increase in payments to fee-for-service providers and expands coverage of preventive services in Medicare's fee-for-service sector. In addition, it ambitiously designs many improvements in Medi-

Table F-1.
Medicare Mandatory Outlays
(By selected fiscal year)

	1990	1997	2002	2008
In Billions of Dollars				
Gross Mandatory Outlays				
Benefits	107	207	276	447
Mandatory administration and grants	<u>a</u>	<u>1</u>	<u>2</u>	<u>1</u>
Total	107	208	277	448
Premiums ^b	<u>-12</u>	<u>-20</u>	<u>-31</u>	<u>-55</u>
Mandatory Outlays Net of Premiums	96	187	246	393
Discretionary Outlays for Administration	<u>2</u>	<u>3</u>	<u>3</u>	<u>4</u>
All Medicare Outlays Net of Premiums	98	190	249	398
Average Annual Growth Rate from Previous Year Shown (Percent)				
Gross Mandatory Outlays		9.9	5.9	8.3
Premiums ^b		8.4	8.8	10.0
Mandatory Outlays Net of Premiums		10.1	5.6	8.1
Discretionary Outlays for Administration		1.7	4.7	4.8
All Medicare Outlays Net of Premiums		9.9	5.6	8.1

SOURCE: Congressional Budget Office.

NOTE: Mandatory outlays for administration support peer review organizations and certain activities against fraud and abuse.

a. Less than \$500 million.

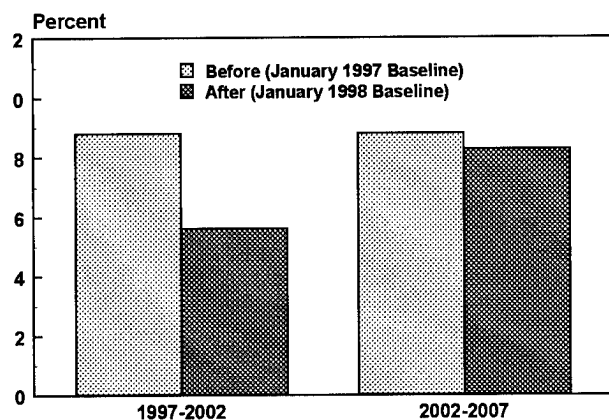
b. Includes collections of civil penalties and criminal fines beginning in 1997.

care's payment systems, setting the stage for further changes to deal with the rapid growth in Medicare spending.

Because the Balanced Budget Act affects virtually all areas of Medicare spending, the Health Care Financing Administration faces a formidable challenge in carrying out the act's many policies. CBO's projections attempt to account for administrative difficulties as well as behavioral responses by beneficiaries and providers. Nevertheless, unforeseen failures or successes in implementing new payment programs, and unexpected responses by health providers to the new payment systems, will add to the uncertainty of Medicare projections for several years to come.

One certainty in Medicare, however, is the impending retirement of the baby-boom generation. Over the next several years, before the first of the baby boomers have reached age 65, increases in Medicare enrollment will account for a small fraction of the growth in Medicare spending. After about 2005, however, the ranks of Medicare beneficiaries will swell, adding pressure to the federal budget in the following decades. Figure F-3 shows how increases in enrollment and changes in the age distribution of Medicare beneficiaries contribute to

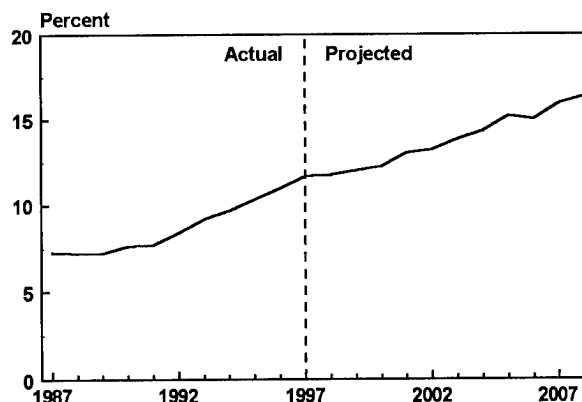
Figure F-1.
Average Annual Growth in Medicare Spending,
Before and After the Balanced Budget Act of 1997
(By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Growth in Medicare spending including premiums.

Figure F-2.
Medicare's Share of Federal Outlays
(By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Includes Medicare premiums.

the growth of Medicare spending through 2030. Initially, baby boomers will add young and relatively healthy enrollees to Medicare. The relatively low cost of the new enrollees will offset some of the financial impact of their sheer numbers between about 2005 and 2020.

Medicare spending is divided into two budgetary categories: Part A benefits, which include hospital inpatient services and skilled nursing facilities and related items, and Part B, which covers physician and outpatient hospital services, durable medical equipment, and certain drugs and other items. Medicare spending for group plans and home health is split between Part A and Part B. Payroll taxes fund Part A benefits through a trust fund. Part B enrollees pay premiums that are set at 25 percent of Part B costs and amount to about 10 percent of Medicare costs overall. No specific federal revenues are linked to the remaining 75 percent of Part B obligations.

The passage of time and the changes made by the Balanced Budget Act have rendered the distinction between Part A and Part B less useful. A more helpful distinction is that between payments for Medicare enrollees in group plans and payments for enrollees in Medicare's fee-for-service sector.

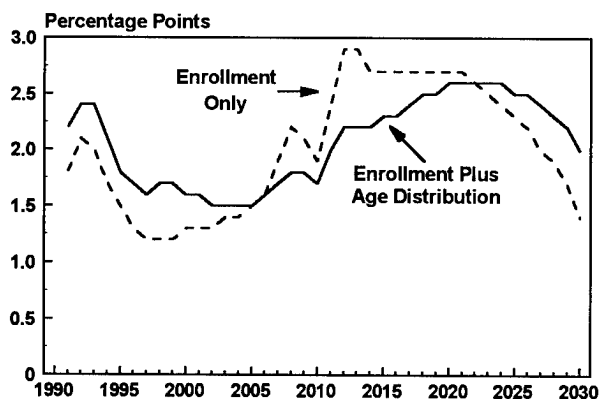
Group Plans

In CBO's projections, Medicare payments for group plans balloon from \$26 billion in 1997 to \$170 billion in 2008 as the share of enrollment in those plans continues to expand (see Table F-2). Under Medicare law, increases in per-enrollee spending in group plans will roughly mirror the performance of the fee-for-service sector.

Medicare generally pays group plans on the first of the month. When the first falls on a weekend or holiday, payments are accelerated to the last business day of the preceding month. In addition, the Balanced Budget Act alters some payment dates for group plans. For those reasons, the number of payments to group plans each fiscal year varies from 11 to 13; the growth of Medicare spending for group plans surges in years with 13 payments and slows in years with 11 payments.

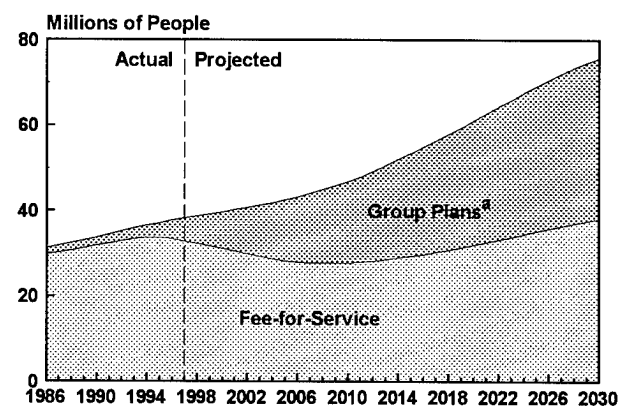
Risk-based plans, which receive capitation (per-enrollee) payments from Medicare and take on the financial risk of patient care for their enrollees, are by far the largest category of group plans. CBO projects that enrollment in Medicare's risk-based plans will grow by 23 percent in 1998, to 5.5 million (see Table F-3). The

Figure F-3.
Contribution of Enrollment and Age Distribution to the Annual Growth of Medicare Spending (By calendar year)



SOURCE: Congressional Budget Office.

Figure F-4.
Medicare Enrollment (By calendar year)



SOURCE: Congressional Budget Office.

a. Includes risk-based plans, cost-based plans, certain demonstrations, and health care prepayment plans.

Balanced Budget Act will expand the number of risk-based plans and enhance their appeal for Medicare enrollment in 1998 and beyond. At the same time, the law will reduce the rate of growth in payments to most plans, especially between 1998 and 2002, which will depress enrollment. On balance, CBO projects that risk-based plans will account for 14 percent of Medicare enrollees in 1998, 25 percent in 2002, 38 percent in 2008, and about 50 percent by 2030 (see Figure F-4).

The projections assume that enrollment in risk-based plans will gradually shift toward younger enrollees (see Figure F-5). Younger beneficiaries (those under about 80 years old) will be more likely to join plans with low copayments for outpatient services. Older beneficiaries will be more likely to take advantage of Medicare's generous home health benefits under the traditional fee-for-service plan.

Because per-enrollee payments to risk-based plans are tied to fee-for-service expenditures, increased enrollment in those plans does not necessarily slow the rate of growth of Medicare spending. Medicare spending for other group plans, which generally are not placed at risk for the cost of patient care, will decline.

Table F-2.
Outlays for Medicare Benefits, by Sector (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Fee-for-Service												
Hospital	106	106	107	109	112	115	120	125	130	136	143	150
Home health, SNF, and hospice care	32	34	36	36	39	41	43	46	48	51	53	55
Physician and related items	43	45	47	48	51	53	55	58	61	65	68	72
Subtotal	181	185	190	193	201	209	219	229	240	252	264	277
Group Plans												
Risk-based plans	24	30	38	47	63	64	83	97	123	120	148	166
Other group plans ^a	1	2	1	1	1	1	1	1	1	1	1	1
Education subsidies to hospitals serving enrollees in risk-based plans	0	b	b	1	1	2	2	2	2	3	3	3
Subtotal	26	32	40	49	65	66	85	100	126	124	151	170
Total	207	217	230	242	266	276	304	329	366	375	415	447
Annual Growth Rate (Percent)												
Fee-for-Service												
Hospital	5	-1	2	2	2	3	4	4	5	5	5	5
Home health, SNF, and hospice care	10	9	4	1	8	6	6	5	5	5	4	4
Physician and related items	2	4	4	4	5	5	5	5	5	5	6	6
All Fee-for-Service	5	2	3	2	4	4	5	5	5	5	5	5
Group Plans	44	24	26	21	33	3	29	17	26	-2	22	12
All Medicare Benefits	8	5	6	5	10	4	10	8	11	3	11	8
Memorandum:												
Average Annual Growth in Medicare Enrollment (Percent)												
Fee-for-service	-1.5	-1.7	-1.9	-2.0	-2.2	-2.1	-2.2	-1.9	-1.6	-1.2	-0.8	-0.4
Group plans	24.9	19.5	16.6	15.2	14.2	12.0	11.3	9.7	8.3	7.3	6.8	6.4
Number of Capitation Payments^c	12	12	12	12	13	11	12	12	13	11	12	12

SOURCE: Congressional Budget Office.

NOTE: SNF = skilled nursing facility.

a. Includes spending for health maintenance organizations (HMOs) paid on a cost basis, certain demonstrations, and health care prepayment plans, which are paid on a cost basis for Part B services.

b. Less than \$500 million.

c. In general, capitation payments to some group plans for the month of October are accelerated into the preceding fiscal year when October 1 falls on a weekend. In addition, the Balanced Budget Act of 1997 accelerates payments that would otherwise have been payable on October 1, 2001, to the last business day of September 2001. The October payments in 2000 and 2006 will be made on October 2 instead of September 29.

Table F-3.
Medicare Enrollment (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Millions of People												
Fee-for-Service	33.0	32.5	31.9	31.3	30.6	29.9	29.2	28.7	28.2	27.9	27.7	27.6
Group Plans												
Risk-based plans	4.5	5.5	6.6	7.8	9.1	10.3	11.5	12.7	13.7	14.8	15.8	16.8
Cost-based plans and demonstrations	0.2	0.3	0.3	0.2	0.1	a	a	a	a	a	0.1	0.1
Health care prepayment plans	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
Subtotal	5.1	6.1	7.2	8.2	9.4	10.5	11.7	12.9	13.9	14.9	16.0	17.0
Total	38.2	38.6	39.0	39.5	40.0	40.4	41.0	41.5	42.2	42.8	43.6	44.5
Annual Growth Rate (Percent)												
Fee-for-Service	-1.5	-1.7	-1.9	-2.0	-2.2	-2.1	-2.2	-1.9	-1.6	-1.2	-0.8	-0.4
Group Plans												
Risk-based plans	30.6	23.0	20.1	18.5	16.1	13.7	11.7	10.0	8.5	7.5	6.9	6.5
Cost-based plans and demonstrations	21.4	13.9	-2.0	-33.1	-36.1	-73.0	10.0	10.0	10.0	10.0	10.0	10.0
Health care prepayment plans	-13.5	-14.4	-22.2	-14.6	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
All Group Plans	24.9	19.5	16.6	15.2	14.2	12.0	11.3	9.7	8.3	7.3	6.8	6.4
All Medicare	1.3	1.2	1.1	1.2	1.2	1.2	1.3	1.4	1.5	1.6	1.9	2.1
Memorandum:												
Part B Enrollment (Millions)	36.4	36.8	37.1	37.6	38.0	38.4	38.9	39.3	39.8	40.4	41.0	41.8

SOURCE: Congressional Budget Office.

NOTE: For simplicity, CBO used Part A enrollment as the measure of Medicare enrollment. Nearly all Medicare enrollees are entitled to Part A and do not have to pay a premium to enroll. By contrast, all Part B enrollees must pay a monthly premium, so some Part A enrollees do not participate in Part B.

a. Fewer than 50,000 people.

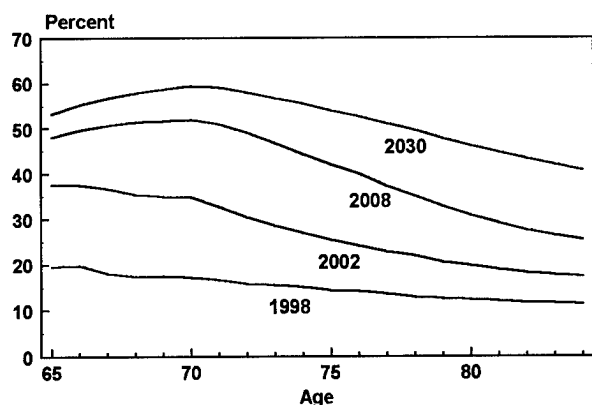
Fee-for-Service Program

Despite a shrinkage in fee-for-service enrollment and cuts in the growth of payment rates for many services, CBO projects that spending in Medicare's fee-for-service program will increase from \$181 billion in 1997 to \$277 billion in 2008. Fee-for-service spending can be broadly divided into care provided at home and at skilled nursing facilities, hospital care and related items, and physicians' services and related items.

Home Health Care and Skilled Nursing Facilities

Growth in payments for home health services and care at skilled nursing facilities (SNFs)—the fastest-growing areas of fee-for-service spending in Medicare over the past decade—is projected to slow over the next 10 years (see Table F-4). The Balanced Budget Act will slow the growth of SNF spending by combining payments for routine services (nursing, room, and board), ancillary services (primarily therapy), and capital expendi-

Figure F-5.
Percentage of Aged Enrollees in Group Plans



SOURCE: Congressional Budget Office.

tures into one bundled payment. The daily payment amount will be based on historical costs, updated by less than inflation through 2002 and by inflation thereafter. Reductions in agency-specific limits and limits related to per-enrollee spending will slow the growth of spending for home health care. The largest impact of those reductions will be felt in 2000.

The aging of the Medicare population, however, will boost spending for home health and SNF care—services that are heavily used by beneficiaries over age 85 (see Figure F-6). Through 2008, CBO projects that older beneficiaries will account for an ever-growing number of Medicare's fee-for-service enrollees. On balance, CBO projects that per-enrollee spending for home health and SNF care will grow, but not at the double-digit rates of the early 1990s.

To adjust for the aging of Medicare enrollees, CBO uses detailed projections of the population produced by the Social Security Administration. Those projections assume a relatively steady trend toward greater longevity. If the life expectancies of Medicare beneficiaries were to increase more rapidly than the Social Security actuaries project, then the outlook for Medicare spending could worsen.

Trust Funds and the Home Health Transfer

To improve the financial situation of the Part A trust fund, the Balanced Budget Act directs the government

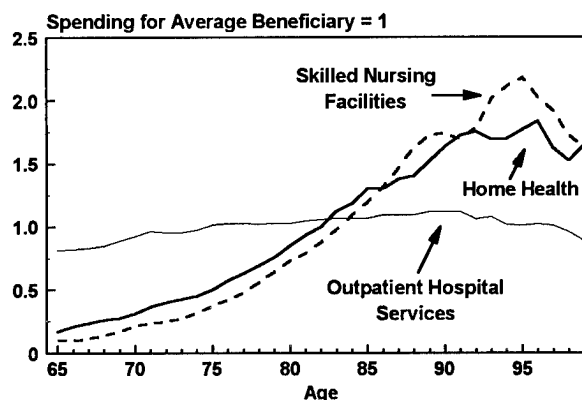
to begin paying certain home health costs—traditionally a Part A benefit—under Part B. CBO estimates that after a phase-in period, home health spending under Part B will exceed that under Part A.

By itself, paying for benefits from one trust fund or the other has no impact on federal spending. In fact, all Part A benefits could be made payable under Part B, permanently saving the Part A trust fund and not affecting federal revenues or expenditures at all. The Congress and the President agreed, however, that home health spending transferred to Part B under the budget plan would gradually be included for the purpose of calculating enrollees' 25 percent premiums for Part B (see Table F-4, which shows both the amounts of home health spending allocated to Parts A and B and the amount of home health spending used in setting the Part B premium).

Hospital Care and Related Items

Medicare payments for hospital care in the fee-for-service sector include Part A payments for inpatient services and Part B payments for outpatient care. Most payments for hospital inpatient care are made under a prospective payment system (PPS), which bases payments on a patient's diagnosis. The Balanced Budget Act freezes PPS payment rates in 1998 and limits cumulative rate increases to about 6 percentage points below inflation over the 1999-2002 period.

Figure F-6.
Medicare Spending, by Age of Beneficiaries



SOURCE: Congressional Budget Office.

Table F-4.
Medicare Fee-for-Service Outlays for Home Health Care, Skilled Nursing Facilities, and Hospice Care
(By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Home Health Care												
Paid under Part A	17.2	16.8	15.8	13.6	13.1	11.6	9.7	9.4	9.8	10.4	10.9	11.4
Paid under Part B	<u>0.3</u>	<u>1.4</u>	<u>3.5</u>	<u>5.5</u>	<u>8.4</u>	<u>11.5</u>	<u>15.0</u>	<u>17.1</u>	<u>18.3</u>	<u>19.3</u>	<u>20.3</u>	<u>21.1</u>
Subtotal	17.5	18.2	19.3	19.0	21.4	23.1	24.8	26.4	28.1	29.7	31.2	32.5
Skilled Nursing Facilities	12.2	14.1	14.2	14.5	15.0	15.4	16.0	16.6	17.2	17.8	18.4	19.1
Hospice Care	<u>2.1</u>	<u>2.2</u>	<u>2.3</u>	<u>2.4</u>	<u>2.5</u>	<u>2.6</u>	<u>2.8</u>	<u>2.9</u>	<u>3.0</u>	<u>3.1</u>	<u>3.2</u>	<u>3.3</u>
Total	31.7	34.4	35.8	36.0	39.0	41.2	43.5	45.9	48.3	50.6	52.8	54.9
Annual Growth Rate (Percent)												
Home Health Care												
Paid under Part A	4	-3	-6	-14	-4	-11	-16	-4	5	6	5	4
Paid under Part B	3	451	143	58	53	38	31	14	7	6	5	4
All Home Health Care	4	4	6	-1	13	8	7	7	6	6	5	4
Skilled Nursing Facilities	21	16	1	2	3	3	3	4	4	4	4	3
Hospice Care	6	5	6	5	4	4	4	4	4	4	4	4
Total	10	9	4	1	8	6	6	5	5	5	4	4
Memorandum:												
Growth of Fee-for-Service Enrollment (Percent)	-1.5	-1.7	-1.9	-2.0	-2.2	-2.1	-2.2	-1.9	-1.6	-1.2	-0.8	-0.4
Home Health Outlays Included in Setting the Part B Premium (Billions of dollars)	0.3	1.2	3.0	4.7	7.2	9.9	12.9	16.2	18.2	19.3	20.3	21.1
Part B Monthly Premium (Dollars)	43.80	43.80	48.70	53.20	58.90	64.80	71.50	78.70	85.40	92.10	99.00	105.70

SOURCE: Congressional Budget Office.

The Balanced Budget Act also establishes cost ceilings for specialty and long-term hospitals not paid under the PPS, limits growth in payment rates for many of those hospitals to less than inflation during the 1999-2002 period, and defines a new payment regime for rehabilitation hospitals. Combined with the effect of reduced subsidies for capital expenditures and graduate medical education, those changes will reduce spending for hospital inpatient services in fee-for-service Medicare by about 1 percent in 1998. In 1999 and there-

after, CBO projects that inpatient spending will resume an upward trend (see Table F-5).

Beginning in 1999, the act requires the Health Care Financing Administration to pay for hospital outpatient services, other than therapy, under a new fee schedule. Much of the savings from that provision are offset, however, by another provision that reduces the coinsurance rates that enrollees pay for those services.

Table F-5.
Medicare Fee-for-Service Outlays for Hospital Care and Related Items (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Inpatient Care^a												
PPS hospital services	76.9	75.2	75.5	76.1	77.2	79.0	81.5	84.3	87.3	90.4	93.7	97.2
Non-PPS hospitals and units of hospitals	<u>12.3</u>	<u>12.8</u>	<u>13.2</u>	<u>13.5</u>	<u>13.7</u>	<u>13.8</u>	<u>14.4</u>	<u>14.9</u>	<u>15.6</u>	<u>16.5</u>	<u>17.5</u>	<u>18.5</u>
Total	89.3	88.0	88.8	89.5	90.8	92.9	95.9	99.2	102.9	106.9	111.2	115.7
Outpatient Care												
Hospital												
Laboratory	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.2	2.3	2.5	2.7	2.8
Medical and surgical services	8.0	8.1	8.6	9.3	9.9	10.6	11.5	12.5	13.6	14.7	16.0	17.2
Other ^b	1.9	2.0	2.1	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9
Related Items												
ESRD services outside hospitals ^c	2.8	3.0	3.2	3.4	3.6	3.7	3.9	4.2	4.4	4.6	4.8	5.0
Therapy services outside hospitals ^d	2.0	2.0	2.1	2.1	2.2	2.4	2.5	2.7	2.9	3.2	3.4	3.7
Graduate medical education (Part B) ^e	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Other ^f	<u>0.5</u>	<u>0.6</u>	<u>0.6</u>	<u>0.7</u>	<u>0.9</u>	<u>1.0</u>	<u>1.1</u>	<u>1.3</u>	<u>1.4</u>	<u>1.6</u>	<u>1.8</u>	<u>2.1</u>
Total	17.1	17.5	18.5	19.6	20.9	22.2	23.8	25.6	27.5	29.5	31.8	34.0
All Hospital Care and Related Items	106.3	105.5	107.2	109.1	111.7	115.1	119.7	124.8	130.4	136.5	143.0	149.7
Annual Growth Rate (Percent)												
Inpatient Care												
PPS hospital services	4	-2	0	1	1	2	3	3	4	4	4	4
Non-PPS hospitals and units of hospitals	7	4	4	2	1	1	4	4	5	6	6	6
All Inpatient Care	5	-1	1	1	1	2	3	3	4	4	4	4
Outpatient Care and Related Items	7	3	5	6	6	7	7	7	7	7	8	7
All Hospital Care and Related Items	5	-1	2	2	2	3	4	4	5	5	5	5
Memorandum:												
Inpatient Hospital Items (Billions of dollars)												
Inpatient capital ^g	8.6	7.2	7.1	7.1	7.2	7.3	7.6	7.8	8.0	8.1	8.3	8.5
Disproportionate share ^h	4.5	4.5	4.5	4.5	4.5	4.9	5.0	5.2	5.4	5.6	5.8	6.1
Indirect medical education ^h	4.5	4.1	3.9	3.7	3.5	3.5	3.7	3.8	3.9	4.1	4.2	4.4
Graduate medical education (Part A) ^g	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3
Average Annual Growth of Fee-for-Service Enrollment (Percent)	-1.5	-1.7	-1.9	-2.0	-2.2	-2.1	-2.2	-1.9	-1.6	-1.2	-0.8	-0.4

SOURCE: Congressional Budget Office.

NOTE: ESRD = end-stage renal disease; PPS = prospective payment system.

- Part A payments for inpatient services furnished to patients enrolled in traditional Medicare. Payments do not include the Part B component of medical education payments or medical education payments for enrollees in risk-based plans.
- Includes payments to hospitals for therapy services, dialysis, ambulance services, drugs, and bad debt.
- Includes dialysis and related services provided at freestanding renal dialysis centers.
- Includes services furnished at skilled nursing facilities, comprehensive outpatient rehabilitation facilities, rehabilitation agencies, and by other outpatient therapy providers.
- Medical education payments paid by Part B for hospital inpatient care.
- Includes rural health clinics, federally qualified health clinics, skilled nursing facilities (for services other than therapy), and community mental health centers.
- Included in payments to non-PPS hospitals and units of hospitals and in payments for PPS hospital services.
- Included in payments for PPS hospital services. These payments include adjustments to both operating and capital-related prospective payments.

The Balanced Budget Act will also reduce spending for outpatient therapy services by requiring that they be reimbursed according to the physician fee schedule. In addition, payments for therapy services performed outside hospitals will be capped at \$1,500 per beneficiary each year. The cap amount will be indexed after 2002.

On balance, CBO projects that spending for outpatient hospital care and related services will increase by about 3 percent in 1998 and will grow by about 7 percent a year between 1999 and 2008.

Table F-6.
Outlays for Physicians' Services and Related Items (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Physicians' Services	30.8	31.9	32.7	33.3	34.0	34.5	35.1	35.7	36.4	37.2	38.1	39.2
Laboratory Services	2.8	2.6	2.6	2.6	2.8	3.0	3.2	3.4	3.6	3.9	4.1	4.4
Prosthetics and Orthotics	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4
Oxygen	1.6	1.5	1.5	1.6	1.8	1.9	2.1	2.3	2.5	2.8	3.0	3.3
Durable Medical Equipment	1.6	1.8	1.9	2.1	2.4	2.6	2.9	3.2	3.5	3.9	4.3	4.7
Ambulance	1.7	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.5	2.6	2.8	3.0
Chiropractic	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.8	0.9	1.0	1.1
Vision Products	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Parenteral and Enteral Nutrition	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8
Pharmaceuticals	2.0	2.3	2.8	3.3	4.0	4.7	5.6	6.5	7.6	8.8	10.0	11.4
Ambulatory Surgical Center Facility Payments	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1	2.3
Other	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total	43.3	44.9	46.5	48.4	50.6	52.8	55.4	58.1	61.2	64.5	68.2	72.2
Annual Growth Rate (Percent)												
Physicians' Services	1	4	2	2	2	2	2	2	2	2	2	3
Laboratory Services	-9	-6	-2	2	5	7	7	7	7	7	7	6
Prosthetics and Orthotics	9	9	10	10	10	10	10	10	10	10	10	9
Oxygen	11	-5	1	7	9	9	9	9	9	9	9	9
Durable Medical Equipment	10	10	9	10	11	11	10	10	10	10	10	10
Ambulance	3	2	5	6	6	6	6	6	6	6	6	7
Chiropractic	16	22	26	18	16	16	14	13	12	11	9	9
Vision Products	0	2	3	3	3	3	3	3	3	3	3	4
Parenteral and Enteral Nutrition	1	-2	-1	1	1	2	3	4	4	4	4	4
Pharmaceuticals	14	15	21	20	19	19	18	17	16	15	14	13
Ambulatory Surgical Center Facility Payments	11	10	10	10	10	10	10	10	10	9	9	10
Other	0	0	0	0	0	0	0	0	0	0	0	0
All Physicians' Services and Related items	2	4	4	4	5	5	5	5	5	5	6	6
Memorandum:												
Average Annual Growth of Fee-for-Service Enrollment (Percent)	-1.5	-1.7	-1.9	-2.0	-2.2	-2.1	-2.2	-1.9	-1.6	-1.2	-0.8	-0.4

SOURCE: Congressional Budget Office.

Physician and Laboratory Services, Durable Medical Equipment and Supplies, and Drugs

Pharmaceuticals, durable medical equipment, and chiropractic care are likely to be the fastest-growing parts of fee-for-service Medicare in the coming decade. Spending for pharmaceuticals under that program has exploded from \$0.5 billion in 1992 to about \$2.0 billion in 1997, a growth rate of over 30 percent a year. Much of that growth stems from expanded coverage over the past several years, although Medicare even now covers only a handful of prescription drugs. Expenditures for durable medical equipment, oxygen, and prosthetics and orthotics increased from \$2.3 billion in 1992 to about \$3.7 billion in 1997, an annual growth rate of over 10 percent.

The Balanced Budget Act will not significantly slow the growth in Medicare's spending for drugs. A 25 percent cut in payment rates for oxygen will crimp the growth in spending for durable items in 1998, but expenditures are likely to resume rapid growth thereafter. CBO expects that a provision to remove the requirement that patients have a diagnostic X-ray will cause spending for chiropractic care to rise dramatically in 1998 and beyond.

Spending for physician and laboratory services grows more moderately in CBO's outlook (see Table F-6). Laboratory spending has fallen in recent years, and rate freezes enacted in the budget plan will restrain payments in the coming years. On a per-enrollee basis, expenditures for physicians' services are set to grow at about the same rate as per capita gross domestic product under new formulas enacted in the Balanced Budget Act.

Budgetary Definitions of Medicare Spending

Medicare outlays can be shown in several forms. The primary measure used in this analysis is mandatory spending, the entitlement cost of Medicare. Spending for Medicare benefits, the largest and most important component of mandatory outlays, is the focus of most of the tables. In addition, total Medicare outlays include discretionary, or appropriated, spending for program administration. Budget function 570, the budgetary classification for Medicare, consists of mandatory outlays for Medicare (net of premiums) and discretionary outlays.

The traditional budgetary breakdown of Medicare outlays focuses on spending paid by Part A or Part B. This analysis instead emphasizes types of services or providers for Medicare benefits: group plans and fee-for-service payments, including hospital care, home health care, physicians' services, and so on. Although those distinctions are more useful for analyzing Medicare spending, they too have their limitations. For example, some outpatient therapy services, categorized by CBO under hospital services and related items, are associated with patients' stays at skilled nursing facilities. Likewise, Medicare subsidies to hospitals for education are included under both hospital benefits in the fee-for-service sector and expenditures for group plans.

Table F-7 details CBO's Medicare projections using the traditional budgetary breakdown of outlays: Part A and Part B, including discretionary spending. The table also shows CBO's projections for the financial status of the Part A trust fund. Under CBO's current projections, that trust fund will be exhausted early in fiscal year 2010.

Table F-7.
Medicare Mandatory Outlays for Parts A and B (By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Part A												
Gross Mandatory Outlays												
Benefits	135.9	138.2	142.5	145.7	155.3	157.0	168.3	178.7	195.8	199.6	217.8	231.8
Administration ^a	0.8	1.0	1.1	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5
Subtotal	136.7	139.2	143.6	146.9	156.5	158.3	169.7	180.2	197.2	201.0	219.3	233.2
Premiums ^b	-1.3	-1.4	-1.4	-1.5	-1.5	-1.6	-1.7	-1.8	-2.0	-2.1	-2.2	-2.4
Mandatory Outlays Net of Premiums	135.4	137.8	142.2	145.4	155.0	156.7	168.0	178.4	195.2	198.9	217.0	230.8
Discretionary Outlays for Administration	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.7	1.7	1.8	1.9
All Part A Outlays Net of Premiums	136.6	139.0	143.5	146.8	156.4	158.2	169.5	179.9	196.9	200.7	218.9	232.8
Part B												
Gross Mandatory Outlays												
Benefits	71.1	78.4	87.1	96.5	110.8	118.6	135.8	150.2	169.9	175.7	197.5	215.2
Grants to states for premium assistance	0	0.2	0.3	0.3	0.3	0.4	0	0	0	0	0	0
Subtotal	71.1	78.6	87.3	96.8	111.1	119.0	135.8	150.2	169.9	175.7	197.5	215.2
Premiums	-19.1	-19.5	-21.4	-23.7	-26.4	-29.5	-32.9	-36.6	-40.4	-44.2	-48.4	-52.7
Mandatory Outlays Net of Premiums	52.0	59.1	66.0	73.1	84.7	89.5	102.9	113.6	129.5	131.5	149.2	162.5
Discretionary Outlays for Administration	1.4	1.5	1.6	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4
All Part B Outlays Net of Premiums	53.4	60.6	67.5	74.7	86.4	91.3	104.8	115.5	131.5	133.7	151.4	164.9
All Medicare												
Gross Mandatory Outlays												
Benefits	207.0	216.6	229.6	242.2	266.0	275.5	304.1	328.9	365.6	375.3	415.4	447.0
Other	0.8	1.2	1.3	1.5	1.6	1.7	1.4	1.4	1.4	1.5	1.5	1.5
Subtotal	207.9	217.8	231.0	243.7	267.7	277.3	305.5	330.4	367.1	376.8	416.8	448.4
Premiums ^b	-20.4	-20.9	-22.8	-25.2	-28.0	-31.1	-34.6	-38.5	-42.4	-46.4	-50.6	-55.1
Mandatory Outlays Net of Premiums	187.4	196.9	208.2	218.5	239.7	246.2	270.9	291.9	324.7	330.4	366.2	393.4
Discretionary Outlays for Administration	2.6	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.7	3.9	4.1	4.3
All Medicare Outlays Net of Premiums	190.0	199.6	211.0	221.5	242.8	249.4	274.3	295.5	328.4	334.3	370.3	397.7
Memorandum:												
Status of Part A Trust Fund												
Income	129	136	143	149	155	161	169	177	186	193	202	209
Outlays	138	140	145	148	158	160	171	182	199	203	221	235
Deficit (-) or surplus	-9	-4	-2	0	-3	2	-2	-5	-13	-9	-19	-26
Part A Trust Fund Balance (End of year)	116	112	109	110	107	108	106	101	88	78	59	33

SOURCE: Congressional Budget Office.

a. Mandatory outlays for administration in Part A support peer review organizations and certain activities against fraud and abuse.

b. Includes collections of civil penalties and criminal fines.

Medicaid and the State Children's Health Insurance Program

The Congressional Budget Office projects that in the absence of new federal legislation, federal outlays for Medicaid will grow from \$96 billion in 1997 to \$210 billion in 2008—an average annual rate of 7.4 percent (see Table G-1). State Medicaid outlays are expected to grow from \$72 billion in 1997 to \$159 billion in 2008. Federal outlays for the State Children's Health Insurance Program (S-CHIP), created as part of the Balanced Budget Act of 1997, are projected to increase from \$1.1 billion in 1998 to \$4.7 billion in 2008.

Medicaid

Over 85 percent of Medicaid spending is for acute and long-term care services. CBO projects that spending for those Medicaid benefits will rise from \$83 billion in 1997 to \$191 billion in 2008 (see Table G-2). Spending for payments to disproportionate share hospitals (DSH), institutions that serve many Medicaid beneficiaries and other low-income people, is projected to decline from \$9 billion to \$8.4 billion between 1997 and 2002 as limits on state allotments enacted in the Balanced Budget Act constrain spending; DSH spending will then grow to \$10 billion in 2008. Administrative expenses account for the rest of the Medicaid program's spending; they rise from \$4 billion in 1997 to \$9 billion by 2008.

In the near term, CBO has reduced projected Medicaid spending by \$3 billion in 1998, and by an average

of \$6 billion in the following years, as compared with its September 1997 projections. That reduction reflects lower-than-projected 1997 outlays, resulting in a smaller base from which to estimate program growth and, thus, lower spending over the projection period. CBO has also reduced projected spending growth from an average annual rate of 7.5 percent to 6.7 percent over the 1997-2003 period. CBO's current projection of spending growth after 2003—about 8.5 percent annually—is comparable with that made in September.

CBO's revised growth pattern takes into account recent rates of low Medicaid growth, but assumes that the very slow growth observed over the past two years will not continue. In contrast to the double-digit growth rates of the early 1990s, Medicaid spending has slowed over the past two years, rising just 3.3 percent in 1996 and 3.9 percent in 1997. CBO attributes the unprecedented slowdown in growth to several factors, including a strong economy with falling welfare caseloads, state initiatives to slow the growth in reimbursement rates for health care providers, one-time savings from enrolling more Medicaid beneficiaries in managed care, and prohibitions on state DSH payments to individual hospitals for more than 100 percent of the costs for uncompensated care.

CBO's current projection assumes that spending will increase by about 5 percent in 1998, by 8 percent in 1999, and from 6 percent to 7 percent annually during the 2000-2002 period (see Figure G-1). That renewed acceleration assumes that the factors that have held down growth over the past two years will subside.

The surge in spending growth between 1998 and 1999 stems from three sources: the phase-in of higher Medicare Part B premiums for people who are eligible for both Medicaid and Medicare, implementation of a provision of the Balanced Budget Act that increases Medicaid payments for veterans' nursing home care by allowing institutionalized veterans to retain their pension, and the full phase-in of changes related to welfare reform in how administrative costs are allocated.

Over the longer term, CBO believes that pressures for higher spending will continue. Combined with the easing of limits on DSH spending after 2002, those forces will raise overall spending growth rates above 8 percent annually. Increased utilization of services will continue to drive growth in a number of areas, especially noninstitutional long-term care, prescription drugs, and clinic services. Between 1996 and 1997, spending for home and community-based services grew 41 percent, pharmacy spending rose 12 percent, and spending on clinic services climbed 18 percent. Additionally, states can still maximize federal revenue by moving state-only programs into the Medicaid program or by using intergovernmental transfers.

Finally, even though one-time savings gained by moving enrollees into managed care plans are expected to help hold down growth in the short term, those initial savings will probably not translate into sustainable low growth. The types of beneficiaries that states are likely to enroll in managed care (children and low-cost adults)

account for a relatively small share of Medicaid spending. Although states are beginning to enroll more disabled beneficiaries in managed care plans, cost-effective managed care models for elderly and disabled Medicaid beneficiaries (who account for 70 percent of Medicaid spending) are still in the early stages of development and may not be able to provide care for the most expensive enrollees under state capitation rates.

Benefits

CBO projects that total benefit payments to providers and health plans (including fee-for-service providers, capitated health insurance plans, and Medicare for certain enrollees) for acute care services and long-term care services will grow from \$83 billion in 1997 to \$126 billion in 2003 and \$191 billion in 2008 (see Table G-2). Those increases correspond to average annual rates of growth of 7.3 percent between 1997 and 2003 and 8.7 percent between 2003 and 2008. Over the entire 1997-2008 period, spending for benefits will increase at an average annual rate of 7.9 percent.

The aged and the blind and disabled account for a quarter of enrollment but three-quarters of total benefit costs, while children and adults (other than the aged and disabled) account for three-quarters of enrollment and one-quarter of total benefit costs. Aged and disabled beneficiaries' share of enrollment and total benefit payments is expected to rise slightly by 2008.

Table G-1.
Federal Payments for Medicaid Benefits, Disproportionate Share Hospitals,
and Administration in Selected Fiscal Years

	Outlays (Billions of dollars)			Average Annual Rate of Growth (Percent)	
	1997	2003	2008	1997-2003	1997-2008
Benefits	82.5	125.9	190.9	7.3	7.9
Disproportionate Share Hospitals	9.0	8.6	10.1	-0.7	1.0
Administration	4.1	6.3	9.3	7.4	7.8
Total	95.6	140.7	210.3	6.7	7.4

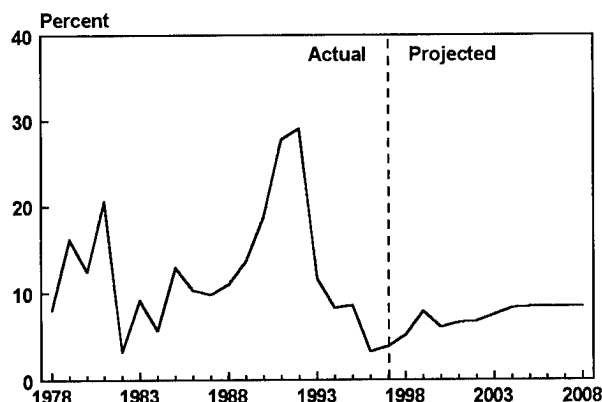
SOURCE: Congressional Budget Office.

Table G-2.
Medicaid Payments and Enrollment (By fiscal year)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Federal Medicaid Payments (Billions of dollars)												
Benefits												
Acute care												
Fee-for-service	38.8	39.0	40.8	42.9	45.5	48.1	51.3	55.1	59.1	63.4	67.9	72.8
Managed care	9.1	11.0	13.1	15.2	17.3	19.6	22.1	24.9	28.0	31.4	35.2	39.5
Medicare premiums	2.2	2.2	2.5	2.7	3.0	3.3	3.6	4.0	4.5	4.9	5.4	5.9
Long-term care	<u>32.5</u>	<u>34.4</u>	<u>37.1</u>	<u>39.8</u>	<u>42.5</u>	<u>45.6</u>	<u>48.8</u>	<u>52.7</u>	<u>57.0</u>	<u>61.8</u>	<u>67.0</u>	<u>72.7</u>
Subtotal	82.5	86.6	93.5	100.5	108.2	116.6	125.9	136.8	148.6	161.5	175.6	190.9
Disproportionate Share Hospital	9.0	9.4	9.8	9.2	8.8	8.4	8.6	8.8	9.2	9.5	9.8	10.1
Administration	<u>4.1</u>	<u>4.5</u>	<u>5.1</u>	<u>5.3</u>	<u>5.6</u>	<u>5.8</u>	<u>6.3</u>	<u>6.8</u>	<u>7.3</u>	<u>8.0</u>	<u>8.6</u>	<u>9.3</u>
Total	95.6	100.5	108.4	115.0	122.6	130.9	140.7	152.4	165.2	179.0	194.0	210.3
Percentage Change in Federal Medicaid Payments												
Benefits												
Acute care												
Fee-for-service	-3.8	0.6	4.6	5.2	6.0	5.8	6.7	7.4	7.3	7.2	7.2	7.1
Managed care	25.8	21.8	19.2	15.3	14.2	13.3	12.7	12.5	12.4	12.3	12.2	12.1
Medicare premiums	3.0	2.7	10.4	9.4	10.6	10.6	10.7	11.4	10.4	10.2	10.0	9.8
Long-term care	8.7	5.9	8.0	7.1	6.8	7.4	7.0	8.0	8.1	8.3	8.4	8.6
Subtotal	3.8	5.0	7.9	7.5	7.7	7.8	7.9	8.6	8.6	8.7	8.7	8.8
Disproportionate Share Hospital	4.4	4.7	4.7	-6.0	-4.7	-4.2	1.9	2.8	4.6	2.9	2.9	2.8
Administration	4.8	9.4	13.5	4.0	5.4	4.7	7.4	8.3	8.4	8.4	8.3	8.5
Total	3.9	5.2	7.9	6.1	6.6	6.8	7.5	8.3	8.4	8.4	8.4	8.4
Federal Benefit Payments by Eligibility Category (Billions of dollars)												
Aged	25.2	26.3	28.4	30.4	32.6	35.0	37.4	40.4	43.6	47.2	51.1	55.4
Blind and Disabled	34.0	35.5	38.6	42.0	45.5	49.5	54.1	59.3	64.9	71.0	77.7	85.0
Children	13.9	15.2	16.1	17.1	18.4	19.6	21.0	22.7	24.5	26.4	28.6	30.9
Adults	<u>9.4</u>	<u>9.7</u>	<u>10.3</u>	<u>11.0</u>	<u>11.7</u>	<u>12.5</u>	<u>13.4</u>	<u>14.4</u>	<u>15.6</u>	<u>16.8</u>	<u>18.2</u>	<u>19.7</u>
Total	82.5	86.6	93.5	100.5	108.2	116.6	125.9	136.8	148.6	161.5	175.6	190.9
Enrollment by Eligibility Category (Millions of people)												
Aged	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.9	5.0	5.1	5.1
Blind and Disabled	6.9	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3	8.6	8.8	9.0
Children	21.0	21.7	22.1	22.6	22.9	23.3	23.6	23.9	24.2	24.5	24.9	25.3
Adults	<u>9.2</u>	<u>8.9</u>	<u>9.0</u>	<u>9.0</u>	<u>9.1</u>	<u>9.1</u>	<u>9.2</u>	<u>9.3</u>	<u>9.4</u>	<u>9.6</u>	<u>9.7</u>	<u>9.8</u>
Total	41.6	42.0	42.8	43.5	44.1	44.8	45.4	46.1	46.8	47.6	48.4	49.2
Memorandum:												
State Share of Medicaid Payments (Billions of dollars)	72.1	75.8	81.8	86.8	92.5	98.7	106.2	114.9	124.6	135.0	146.3	158.7
Total State and Federal Medicaid Payments (Billions of dollars)	167.6	176.3	190.2	201.8	215.1	229.6	246.9	267.3	289.7	314.0	340.3	369.0

SOURCE: Congressional Budget Office.

Figure G-1.
Annual Growth in Medicaid Outlays
from Previous Year (By fiscal year)



SOURCE: Congressional Budget Office.

Acute Care Services. For acute care services, CBO projects that payments will grow 7.5 percent annually over the next five years, accelerating in the long term to 8.1 percent annually. CBO's acute care projections account for fee-for-service and managed care spending separately, building from enrollment projections in each sector.

CBO projects that fee-for-service acute care payments will increase from \$39 billion in 1997 to \$73 billion in 2008, an average annual growth rate of 5.9 percent. Those projections reflect increases in payment rates to providers, changes in the size and composition of enrollment, and utilization. CBO adjusted projections of fee-for-service outlays to account for an increasing number of beneficiaries moving out of fee-for-service and into fully capitated managed care arrangements. Increasing enrollment in managed care plans, however, does not result in a one-for-one decrease in fee-for-service enrollment. In contrast to Medicare, where beneficiaries can be enrolled in only one sector, Medicaid beneficiaries may be enrolled in managed care and fee-for-service programs simultaneously. They can do that because some states have carve-outs for certain types of benefits that are paid on a capitated basis, and others pay fee-for-service wraparound benefits for some capitated enrollees. Therefore, caseload adjustments account for fully capitated enrollees only.

CBO estimates that outlays for capitated managed care plans will increase from \$9 billion in 1997 to \$40 billion in 2008, an average annual rate of 14 percent. That growth stems from a rapid expansion in enrollment and increases in capitation rates. Those payments are for both capitated and partially capitated plans and do not include spending for primary care case management programs, which are included in fee-for-service payments. About 24 percent of Medicaid enrollees were in capitated managed care plans in 1996, and CBO expects managed care enrollment to increase rapidly in the near term as states take advantage of new flexibility to implement managed care without waivers. Over the 1997-2003 period, enrollment in capitated managed care plans will increase at rates exceeding 10 percent annually. In the longer term, growth in managed care enrollment will taper off as states encounter more difficulty in enrolling chronically ill beneficiaries. CBO projects that costs per enrollee in managed care plans will increase at the same rates as fee-for-service plans.

In 1997, the federal share of Medicaid payments for Medicare premiums was about \$2 billion. Those payments are projected to triple by 2008, to \$6 billion. CBO estimates that there were approximately 5 million Medicare Part B buy-ins in 1997, wherein Medicaid paid for Medicare premiums and, in most cases, cost sharing for beneficiaries. That total includes 4.6 million qualified Medicare beneficiaries (QMBs) and 0.3 million specified low-income Medicare beneficiaries (SLMBs).¹ About half of those QMBs are dually eligible for full Medicaid and Medicare benefits. Another 350,000 beneficiaries were QMBs for whom Medicaid also paid Medicare Part A premiums. CBO estimates that by 2002, total Medicare buy-ins will increase to 5.3 million people, about 15 percent of all Medicare beneficiaries. CBO does not separately project payments for Medicare cost sharing that are made directly to providers. Such payments are included in spending for other fee-for-service acute care services.

1. Qualified Medicare beneficiaries are Medicare beneficiaries with income at or below 100 percent of the federal poverty level for whom Medicaid pays Medicare Part B premiums and cost-sharing amounts. QMBs who also qualify for full Medicaid benefits are referred to as dual-eligibles. Specified low-income Medicare beneficiaries are people with income between 100 percent and 120 percent of the poverty level for whom Medicaid pays the Medicare Part B premium only.

Long-Term Care Services. CBO estimates that long-term care payments, which account for 40 percent of total benefit payments, will increase from \$33 billion in 1997 to \$73 billion in 2008, an average annual rate of 7.6 percent. Those projections account for increases in payment rates to providers, changes in the size and composition of enrollment, and utilization of services, particularly noninstitutional care services such as home and community-based service waivers and personal care services. CBO predicts that noninstitutional care services will grow as a share of long-term care spending from one-quarter to one-third.

Enrollment. CBO projects that Medicaid enrollment will increase at an average annual rate of 1.5 percent over the 1997-2003 period, from 42 million in 1997 to over 45 million in 2003 (see Table G-2). That rate is slightly lower than the rate projected last year, but the change reflects the net effect of an increase in projected enrollment growth for children and a reduction in projected enrollment growth for adult, aged, and disabled beneficiaries.

Although Medicaid program data for 1997 are not yet available, welfare rolls declined precipitously in 1997, falling 13 percent. CBO assumes that those reductions in welfare caseloads generated lower Medicaid enrollment for children and adults in 1997 than previously estimated, thus lowering the base from which projections are made. CBO has raised slightly the projected average annual growth in Medicaid enrollment for children over the 1997-2003 period to 1.9 percent, up from 1.4 percent projected last year. That increase mainly comes from two sources: the Medicaid-eligible children who were discovered during implementation of the State Children's Health Insurance Program and the adoption by some states of 12 months of continuous eligibility for children. (Children who live in states where S-CHIP is implemented by expanding the state Medicaid program are not included in that number, however.) Through 2002, the increase includes an additional 125,000 children annually who will participate in Medicaid as a result of the Omnibus Budget Reconciliation Act of 1990, which required states to phase in coverage of children up to age 18 whose family income falls below the poverty level.

CBO has reduced projected growth in Medicaid enrollment for both aged and disabled beneficiaries over the 1997-2003 period. For the aged, enrollment is

projected to increase at an average annual rate of 1 percent, compared with 1.6 percent projected last year; for the disabled, enrollment will increase at an average annual rate of 2.2 percent, compared with 2.7 percent projected last year. Those projections reflect slower growth in the caseload for the Supplemental Security Income program, to which Medicaid eligibility is tied in most states. After 2003, enrollment growth accelerates for all categories, except for children, for whom enrollment growth declines slightly.

Disproportionate Share Hospital Payments

In January 1997, CBO projected that DSH payments would increase at an average rate of 7.7 percent a year. Since then, the Balanced Budget Act established specific state allotments for DSH payments for each year over the 1998-2002 period. For 2003 and later years, allotments will be increased by the consumer price index, but not in excess of 12 percent of a state's spending for medical assistance. The Balanced Budget Act also limited state expenditures for institutions for mental diseases to the lesser of either the amount spent on those institutions in 1995 or a specified percentage (which declines to 33 percent after 2002) of total DSH spending.

CBO assumes that DSH payments will increase from \$9 billion in 1997 to \$10 billion in 1999, fall to \$8.4 billion in 2002, and then rise again to \$10 billion in 2008, an average growth rate of 1 percent a year over the entire period. CBO estimates that state DSH spending will grow moderately in 1998 and 1999 until it hits the allotment ceiling determined in the Balanced Budget Act. The mental health DSH limitations decrease spending on DSH between 2000 and 2003, when those provisions become very stringent.

Administrative and Other Costs

CBO has slightly decreased projections of Medicaid administration payments to account for the net effect of new program costs and overall decreases in the rate of growth in medical assistance payments. The estimate accounts for \$500 million in spending over the 1998-2002 period provided in the welfare reform act to conduct eligibility determinations. It also accounts for

Table G-3.
Federal Payments for the State Children's Health Insurance Program
(By fiscal year, in billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Budget Authority	n.a.	4.3	4.3	4.3	4.3	3.2	3.2	3.2	4.1	4.1	5.0	5.0
Outlays ^a												
New program spending	n.a.	0.6	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4
Funds transferred to Medicaid	n.a.	0.6	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4
Total	n.a.	1.1	3.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.4	4.7

SOURCE: Congressional Budget Office.

NOTES: Medicaid spending under S-CHIP is not included in federal Medicaid payments shown above.

S-CHIP = State Children's Health Insurance Program; n.a. = not applicable.

a. Estimated.

higher Medicaid costs attributable to changes in accounting for administrative expenses, and states' shifting of welfare administrative functions to Medicaid to maximize federal matching payments. Those factors are fully phased in by 1999. CBO's projections also account for potential Medicaid-related recoveries from states in the absence of a national tobacco settlement. CBO estimates that administrative payments will grow at an average annual rate of 7.8 percent between 1997 and 2008, rising from \$4.1 billion to \$9.3 billion.

State Children's Health Insurance Program

The Balanced Budget Act established the State Children's Health Insurance Program as title XXI of the Social Security Act. S-CHIP provides matching funds to states to initiate and expand health care assistance for uninsured low-income children. Under S-CHIP, states receive an enhanced match equal to their Medicaid match rate plus 30 percent of the difference between that rate and 100 percent, not to exceed 85 percent. States may purchase health insurance coverage for eligible children in the private market or expand their Medicaid program. They may also arrange for health

care services directly through providers. CBO assumes that states will spend one-half of their title XXI funds to expand their Medicaid programs.

The Balanced Budget Act appropriated \$4.3 billion in spending each year from 1998 through 2001, \$3.2 billion a year for 2002 through 2004, \$4.1 billion in 2005 and 2006, and \$5.0 billion in 2007 (see Table G-3).² In estimating the costs of that legislation, CBO assumed that all of the amount appropriated would be spent in each year. Recent experience indicates, however, that states will not be able to spend their full allotment during the first two years. As a result, CBO estimates that federal outlays under title XXI for S-CHIP will be 25 percent of the available block grant in 1998 and 75 percent in 1999, as states submit plans and begin to develop programs. By 2000, CBO estimates that federal outlays will reach \$4 billion per year. About 2.3 million children will be covered with S-CHIP funds on an average annual basis after 1999; that figure includes both previously insured and uninsured children.

2. Under the baseline rules specified by the Deficit Control Act, CBO's projections assume that the same level of funding will be provided for 2008.

Projections of National Health Expenditures: 1997-2008

The Congressional Budget Office (CBO) estimates that calendar year 1997 will mark the fourth consecutive year in which national health spending grew no faster than the nation's gross domestic product (GDP).¹ By contrast, health spending's share of the economy grew from 9 percent to more than 12 percent between 1980 and 1990, and by another 1.5 percentage points between 1990 and 1993. Since 1993, however, health spending has stabilized at about 13.5 percent of GDP (see Table H-1). That is the longest period in which the health sector has grown no faster than the rest of the economy in at least 30 years.

The slowdown in the growth of health spending has been caused largely by changes in the nature and purchasing of private health insurance. Before the 1990s, health insurance was dominated by fee-for-service plans, which had only a limited ability to control health costs. In the mid-1990s, a wide variety of managed care plans, with greater potential to control costs, led a surge of competition in the marketplace. Managed care plans can reduce costs both by negotiating favorable prices with health providers and by controlling the volume of services provided. The new plans allow employers to search aggressively for lower premiums and richer benefit packages. Managed care plans and the competition they have spawned are helping to offset (rather than eliminate) some of the root problems that

have historically weakened price competition in the health sector.²

CBO projects that the growth in health spending will soon accelerate, and that national health expenditures will reach 15.5 percent of GDP by 2008 (see Figure H-1 and Table H-2). That percentage is slightly lower than CBO's 1997 projection of 16 percent of GDP (in 2007). The downward revision stems from reductions in Medicare outlays resulting from the Balanced Budget Act of 1997 (explained in Appendix F of this report) and lowered projections of Medicaid spending (explained in Appendix G).

CBO's current projections of private health spending are generally similar to those described last year in *The Economic and Budget Outlook: Fiscal Years 1998-2007* (January 1997). The current projections reflect updated figures on historical health spending through 1996 from the Health Care Financing Administration and an updated economic forecast (described in Chapter 1). Figure H-2 shows CBO's current and previous projections of the growth in private health insurance premiums and the excess of that growth over the growth of GDP.

Last year, CBO projected that the annual growth of private health insurance premiums would stabilize at about 1 percentage point higher than the rate of GDP

1. The appropriate benchmark for comparisons between health spending and the economy is nominal GDP. Growth in nominal GDP includes both price change and growth in real output.

2. CBO described some of the reasons for such a rapid change in the environment for health care purchases in *The Economic and Budget Outlook: An Update* (August 1995).

Table H-1.
National Health Expenditures for Selected Calendar Years, by Source of Funds

Source of Funds	Actual						Projected			
	1965	1980	1990	1993	1995	1996	1997	1998	2000	2008
In Billions of Dollars										
Private	31	142	415	506	536	552	573	600	659	1,026
Public										
Federal	5	72	196	280	329	351	374	392	439	773
State and local	<u>5</u>	<u>33</u>	<u>89</u>	<u>109</u>	<u>126</u>	<u>132</u>	<u>138</u>	<u>145</u>	<u>161</u>	<u>255</u>
Total	41	247	700	895	991	1,035	1,085	1,138	1,259	2,055
As a Percentage of Total Expenditures										
Private	75	58	59	57	54	53	53	53	52	50
Public										
Federal	12	29	28	31	33	34	34	34	35	38
State and local	<u>13</u>	<u>13</u>	<u>13</u>	<u>12</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	<u>12</u>
Total	100	100	100	100	100	100	100	100	100	100
Average Annual Growth from Previous Year Shown (Percent)										
Private		10.7	11.3	6.8	2.9	3.0	3.8	4.7	4.8	5.7
Public										
Federal		19.7	10.5	12.6	8.4	6.7	6.5	5.0	5.8	7.3
State and local		12.7	10.4	7.3	7.6	4.5	4.6	5.0	5.3	5.9
All National Health Expenditures		12.7	11.0	8.6	5.2	4.4	4.8	4.9	5.2	6.3
Memorandum:										
Gross Domestic Product (Billions of dollars)	719	2,784	5,744	6,558	7,265	7,636	8,081	8,461	9,195	13,280
Average Annual Growth of GDP (Percentage change from previous year shown)		9.4	7.5	4.5	5.3	5.1	5.8	4.7	4.2	4.7
Ratio of National Health Expenditures to GDP (Percent)	5.7	8.9	12.2	13.6	13.6	13.6	13.4	13.4	13.7	15.5

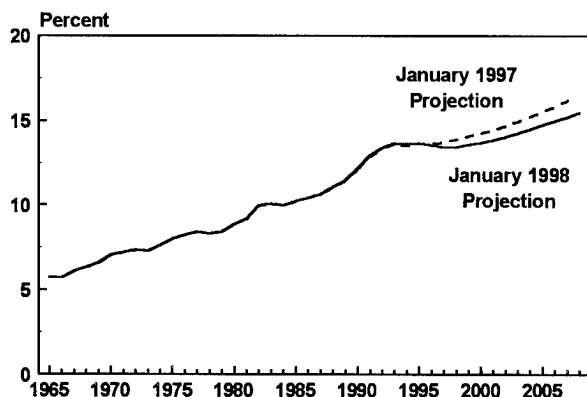
SOURCE: Congressional Budget Office.

growth—considerably faster than the rates observed in the mid-1990s, but well below the historical average of about 4 percentage points more than growth in GDP. CBO assumed that as the economy maintained full employment, workers and the employers who purchase health insurance on their behalf would focus less on costs and more on quality, resulting in higher growth in premiums. At the same time, CBO assumed that the new plans and competition in the 1990s were permanent features of the health market and that future growth in premiums was unlikely to return to its historical average.

Both assumptions still appear valid. CBO projects that the growth in health premiums will be 5.5 percent in 1998, up from 3.8 percent in 1997. That increase will stem from the predicted emphasis on quality, an economy that has been even stronger than expected, and a short-term profit cycle in the health insurance industry. CBO continues to project that premiums will grow about 1 percentage point faster than GDP in the longer run as pressures to restrain cost increases balance pressures for more services and higher quality.

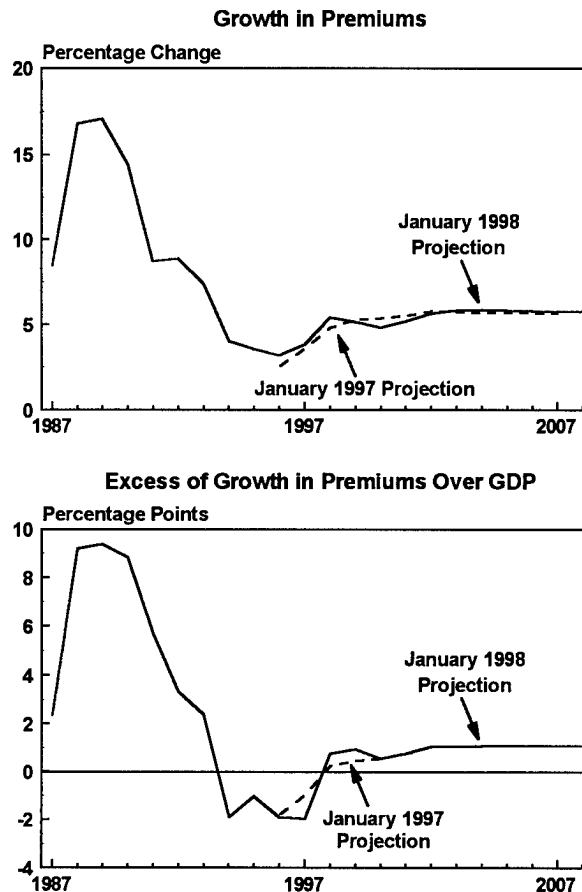
CBO's health projections assume that current federal laws and key regulations continue unchanged. However, proposed changes in federal law could change private health spending. Laws to protect health consumers could raise private premiums. Laws intended to

Figure H-1.
National Health Spending as a Percentage of GDP (By calendar year)



SOURCE: Congressional Budget Office.

Figure H-2.
Private Health Insurance Premiums
(By calendar year)



SOURCE: Congressional Budget Office.

aid health providers in their dealings with insurance plans could raise the growth of health costs as well. Medicare expansions or other laws that would extend public coverage could substitute for private insurance, reducing private health spending.

Strong Economic Growth Will Help Boost Premiums in 1998

Pressures for more and higher-quality health services are always strong. In the current health market, however, pressure to restrain premium increases is deter-

Table H-2.
Projections of National Health Expenditures Through 2008, by Source of Funds (By calendar year)

Source of Funds	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Private												
Private health insurance	350	369	389	407	428	453	479	507	537	568	601	636
Out of pocket	178	184	192	201	212	224	237	251	265	281	297	314
Other	<u>45</u>	<u>46</u>	<u>48</u>	<u>50</u>	<u>53</u>	<u>56</u>	<u>59</u>	<u>62</u>	<u>65</u>	<u>69</u>	<u>72</u>	<u>76</u>
Subtotal	573	600	629	659	693	732	775	820	868	918	970	1,026
Federal												
Medicare	219	230	244	259	278	299	324	350	379	409	440	473
Medicaid	96	101	109	116	123	132	142	154	167	181	196	212
Other	<u>59</u>	<u>61</u>	<u>63</u>	<u>65</u>	<u>67</u>	<u>70</u>	<u>72</u>	<u>75</u>	<u>78</u>	<u>81</u>	<u>84</u>	<u>88</u>
Subtotal	374	392	415	439	468	501	538	579	623	670	720	773
State and Local												
Medicaid ^a	58	62	66	70	75	80	87	94	102	110	119	129
Other	<u>80</u>	<u>83</u>	<u>87</u>	<u>91</u>	<u>95</u>	<u>99</u>	<u>103</u>	<u>108</u>	<u>112</u>	<u>117</u>	<u>121</u>	<u>126</u>
Subtotal	138	145	153	161	170	179	190	201	214	227	241	255
All National Health Expenditures	1,085	1,138	1,197	1,259	1,332	1,412	1,503	1,601	1,705	1,815	1,931	2,055
Annual Percentage Change												
Private												
Private health insurance	3.8	5.5	5.2	4.8	5.2	5.6	5.9	5.9	5.9	5.8	5.8	5.8
Out of pocket	3.8	3.7	4.2	4.8	5.5	5.6	5.8	5.8	5.8	5.7	5.7	5.7
Other	3.2	3.3	3.9	4.4	4.9	5.2	5.4	5.4	5.4	5.4	5.4	5.4
All Private	3.8	4.7	4.8	4.8	5.3	5.6	5.8	5.8	5.8	5.8	5.7	5.7
Federal												
Medicare	8.0	4.9	5.9	6.2	7.4	7.6	8.3	8.2	8.1	7.9	7.8	7.5
Medicaid	4.2	5.9	7.4	6.2	6.6	7.0	7.7	8.3	8.4	8.4	8.4	8.4
Other	4.6	3.7	3.4	3.4	3.6	3.7	3.9	3.9	3.9	3.8	3.8	3.8
All Federal	6.5	5.0	5.9	5.8	6.6	6.9	7.5	7.6	7.6	7.5	7.5	7.3
State and Local												
Medicaid ^a	4.3	6.0	7.5	6.2	6.6	6.9	7.7	8.3	8.4	8.4	8.4	8.4
Other	4.9	4.3	4.2	4.2	4.3	4.4	4.4	4.3	4.2	4.1	4.0	3.9
All State and Local	4.6	5.0	5.6	5.1	5.3	5.5	5.9	6.1	6.2	6.1	6.1	6.2
All National Health Expenditures	4.8	4.9	5.3	5.2	5.8	6.0	6.4	6.5	6.5	6.5	6.4	6.4

SOURCE: Congressional Budget Office.

a. The national health expenditures data use a different definition of state and local Medicaid spending than that used for budgetary purposes.

mined mostly by the strength of the economy. In a period of strong growth and low unemployment, employers and employees may hesitate to switch to lower-cost health plans. In a weak economy, when the trade-off between health costs and wages is more apparent, low-cost health plans have more appeal.

The economy surged in 1997, with unemployment likely to average only 4.9 percent for the year. CBO estimates that nominal GDP grew by 5.8 percent, about 1.2 percentage points higher than projected last January. CBO currently expects GDP growth of 4.7 percent in 1998.

CBO's projection of health insurance premiums reflects adjustments in CBO's forecast of GDP growth, with faster GDP growth in 1997 leading to more rapid growth in premiums in 1998.

After several years of restraint, some large purchasing groups have announced increases in health premiums for 1998. The Federal Employees Health Benefits program, for example, which had held premiums virtually steady since 1993, announced that premiums would increase by about 8.5 percent in 1998 if enrollment selections were unchanged from 1997. Enrollees of Minnesota's state employees health plan face similar in-

Table H-3.
Annual Growth of Premiums or Costs for Health Insurance, Calendar Years 1990-1997 (In percent)

	1990	1991	1992	1993	1994	1995	1996	1997
FEHB ^a	9	6	7	10	2	-4	0	2
CalPERS ^b	17	11	6	1	-1	*	-4	-1
HayGroup ^c	17	13	11	8	3	2	-2	-1
Foster Higgins ^d	17	12	10	8	-1	2	2	*
KPMG Peat Marwick ^e	*	12	11	8	5	2	0	2
Bureau of Labor Statistics ^f	12	11	10	8	6	2	0	0

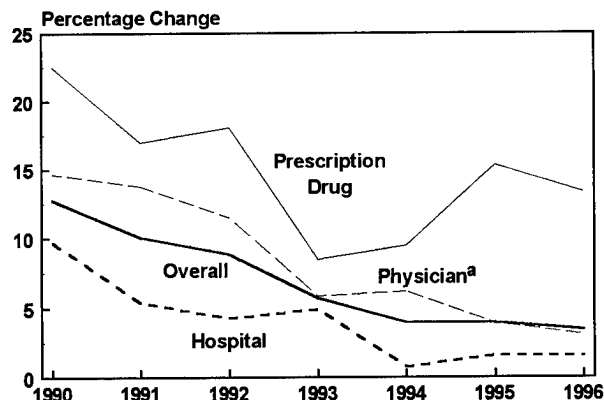
SOURCE: Congressional Budget Office based on the sources below.

NOTES: Zero growth in the table means an increase or decline of less than 0.5 percent.

FEHB = Federal Employees Health Benefits program; CalPERS = California Public Employees Retirement System; * = not available.

- a. Office of Personnel Management, Federal Employees Health Benefits program.
- b. CalPERS, Health Plan Administration Division. Data for 1995 are unavailable because CalPERS changed the definition of its contract year. Before 1995, the CalPERS contract year ran from August 1 to July 31. In 1995, CalPERS began to switch its contract year to a calendar year basis. The 1994 data are for the contract year starting on August 1, 1994, and ending on July 21, 1995. The 1996 data are for the contract year starting on August 1, 1995, and ending December 31, 1996. Data underlying calculations for 1997 correspond to calendar year premium costs.
- c. HayGroup, *Hay Benefits Report* (Washington, D.C.: HayGroup, 1990 through 1996). The surveys use average premiums for all employers on a "same company" basis for the most prevalent plan, based on a sample of public and private employers that generally have at least 100 employees.
- d. Foster Higgins, *National Survey of Employer-Sponsored Health Plans* (New York: Foster Higgins, 1990 through 1996). The surveys are based on a sample of private and public employers with 10 or more employees.
- e. KPMG Peat Marwick, *Health Benefits* (Tysons Corner, Va., and San Francisco: KPMG Peat Marwick, 1990 through 1997). The surveys are based on a sample of private and public employers with 200 or more employees.
- e. Department of Labor, Bureau of Labor Statistics, employment cost index. The index covers only the employer's share of premiums or costs. Growth rates measure changes in cost over a 12-month period from March to March.

Figure H-3.
Growth in Spending for Private Health Insurance Benefits (By calendar year)



SOURCE: Congressional Budget Office.

a. Includes the services of dentists and other health professionals.

creases. CalPERS, a large California purchasing group, announced a 3 percent increase for 1998, after four years of declining premiums. Table H-3 shows premium trends for FEHB and CalPERS and other indicators of the growth in costs or premiums for health insurance over the past several years.

In part, the 1998 premium increases signal a profit cycle in the industry rather than a dramatic change in the costs of insurance. Historically, health premiums offered by competing plans have tended to grow in tandem. The industry as a whole has had years of high profits, when premiums collected exceeded benefits paid, and years of poor profitability, when the gap between premiums and costs diminished.

Based on recent data from the American Hospital Association and other sources, CBO estimates that the costs of health insurance continue to grow quite slowly, with the exception of benefits for prescription drugs. Many managed care plans offer generous prescription drug benefits, and while the growth in spending for hospital care and professional services has fallen significantly in recent years, drug expenditures have resumed a double-digit pace (see Figure H-3).

CBO expects that growth in spending for benefits will lag the premium increases achieved by plans in 1998, improving health plans' profit margins in 1998

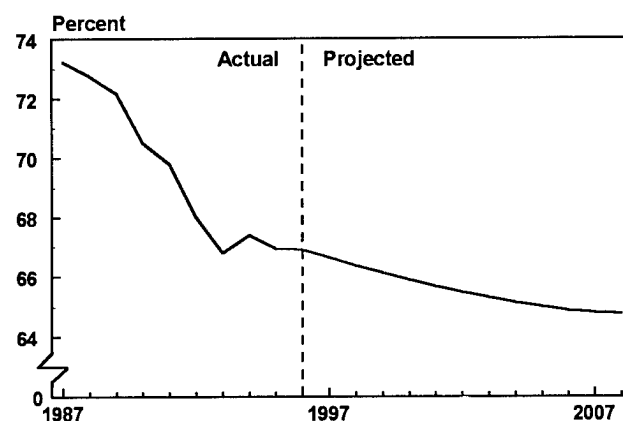
after two years of relatively weak profits. The profits of some large network plans, many of which had bid aggressively for market share in recent years, have faltered in 1996 and 1997. Pullbacks by those plans, which had formed networks quickly and had often led price wars, will probably yield higher 1998 premiums in some areas.

Projections of Private Health Insurance Through 2008

CBO's long-run projection for health insurance premiums is based on underlying growth in benefit costs and an assumption that profit and administration rates remain constant. Because benefit costs remain likely to grow at moderate rates, CBO has not changed its long-run projection for growth in premiums: about 1 percent above GDP growth.

CBO projects that the growth of nominal GDP will fall to 4.2 percent in 1999 and will average about 4.5 percent over the next 10 years. Therefore, CBO's pro-

Figure H-4.
Number of People with Employment-Based Health Insurance Coverage as a Percentage of the Population Under Age 65 (By calendar year)



SOURCE: Congressional Budget Office.

NOTE: Historical figures based on tabulations of the Current Population Surveys done by the Employee Benefit Research Institute. Data for 1996 are from the March 1997 Current Population Survey.

jection of the rate of growth in private health insurance premiums averages about 5.5 percent a year.

The share of the under-65 population covered by employment-based health plans fell rapidly in the late 1980s and early 1990s, but then stabilized at about two-thirds after 1992 (see Figure H-4). The total number of people with employer plans actually began to rise in 1994. The combination of the solid economic growth and slowly growing premiums no doubt helped break the downward trend. CBO projects that with slower economic growth and faster growth in health premiums over the next 10 years, the share of people

covered by employment-based plans will resume at its downward drift, although at slower rates than were seen in the early 1990s.

Table H-4 details CBO's projections of private health insurance spending in the 1997-2008 period. Those projections reflect the assumptions discussed above and also the impact of the State Children's Health Insurance Program enacted under the Balanced Budget Act of 1997. That program will fund state initiatives to provide health insurance for children. Because some children who are newly insured under the state programs would have been covered by private

Table H-4.
Projections of Private Insurance Premiums (By calendar year)

Type of Insurance	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
In Billions of Dollars												
Employment-Based Insurance												
Employer contributions	274	288	303	317	333	351	371	392	415	438	463	489
Employee/retiree contributions	<u>55</u>	<u>59</u>	<u>63</u>	<u>67</u>	<u>71</u>	<u>76</u>	<u>81</u>	<u>87</u>	<u>93</u>	<u>100</u>	<u>107</u>	<u>115</u>
Subtotal	329	347	366	383	404	427	453	480	508	538	570	604
Individual Insurance	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	<u>33</u>
Total, Private Health Insurance	350	369	389	407	428	453	479	507	537	568	601	636
Annual Percentage Change												
Employment-Based Insurance												
Employer contributions	* 3.7	5.4	5.0	4.6	5.0	5.5	5.7	5.8	5.7	5.7	5.6	5.6
Employee/retiree contributions	5.2	6.9	6.5	6.1	6.5	7.0	7.2	7.2	7.1	7.1	7.0	7.0
All employment-based insurance	4.0	5.6	5.2	4.9	5.3	5.7	6.0	6.0	6.0	5.9	5.9	5.9
Individual Insurance	2.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All Private Health Insurance	3.8	5.5	5.2	4.8	5.2	5.6	5.9	5.9	5.9	5.8	5.8	5.8

SOURCE: Congressional Budget Office.

health insurance in the absence of those programs, CBO estimates that enactment of the Balanced Budget Act will slightly reduce spending on private health insurance and the number of people privately covered.

Future legislation, in states and the federal government, could affect the course of private health spending. CBO's health projections explicitly assume that current federal laws and key regulations continue unchanged. In addition, the current projections assume that there will be no major changes in state laws affecting private health spending.

Proposed consumer protection laws involving disclosure of information, appeals and grievances, and so on, could boost health spending slightly, but probably would not alter any longer-term trends. Similarly, most benefit or coverage mandates would cause a one-time jump in costs, but would not in most cases alter the trajectory of private spending growth.

Provider protection laws have greater potential to raise the growth of health spending in the longer run. Laws that would mandate coverage of the services of certain providers or change the financial relationships between health providers and plans could dull some of the tools that plans now use to hold down costs in a competitive market.

Major Contributors to the Revenue and Spending Projections

The following Congressional Budget Office analysts prepared the revenue and spending projections in this report:

Revenue Projections

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Spending Projections

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Other

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Edward Blau	Authorization bills
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Sandra Hoffman	Computer support
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Daniel Kowalski	Credit programs, other interest
Catherine Mallison	Appropriation bills
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Glossary

This glossary defines economic and budgetary terms as they relate to this report. Some entries sacrifice precision for brevity and clarity to the lay reader. Where appropriate, sources of data for economic variables are indicated as follows:

- o BEA denotes the Bureau of Economic Analysis in the Department of Commerce;
- o BLS denotes the Bureau of Labor Statistics in the Department of Labor;
- o CBO denotes the Congressional Budget Office;
- o FRB denotes the Federal Reserve Board; and
- o NBER denotes the National Bureau of Economic Research.

aggregate demand: Total purchases of a country's output of goods and services by consumers, businesses, government, and foreigners during a given period. (BEA)

appropriation act: A statute or legislation under the jurisdiction of the House and Senate Committees on Appropriations that provides budget authority. Enactment of an appropriation act generally follows adoption of an authorization. Currently, there are 13 regular appropriation acts each year; the Congress may also enact supplemental or continuing appropriations.

authorization: A statute or legislation that establishes or continues a federal program or agency. An authorization is normally prerequisite to consideration and enactment of an appropriation act. For some programs, the authorization itself provides the authority to incur obligations and make payments.

Balanced Budget Act of 1997 (Public Law 105-33): This act carried out reconciliation instructions contained in the budget resolution for fiscal years 1998 through 2002. Title X amended the Deficit Control Act by setting discretionary spending caps for each fiscal year through 2002, extending pay-as-you-go procedures for all affected legislation enacted through 2002, and making corresponding extensions in the sequestration procedures. The act created separate discretionary spending caps for defense and nondefense spending through 1999 and a third cap for violent crime reduction spending through fiscal year 2000. In addition, title X amended the Congressional Budget Act of 1974 to make various conforming procedural changes. See **reconciliation**, **discretionary spending caps**, and **pay-as-you-go**.

Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177): Referred to in this report as the Deficit Control Act, the act was originally known as Gramm-Rudman-Hollings. The act set forth specific deficit targets and a sequestration procedure to reduce spending if those targets were exceeded. The act also amended the Congressional Budget Act of 1974 to make significant changes in Congressional budget procedures. The Deficit Control Act has been amended and extended several times—most significantly by the Budget Enforcement Act of 1990 and most recently by the Omnibus Budget Reconciliation Act of 1993 and the Balanced Budget Act of 1997. See **discretionary spending caps** and **pay-as-you-go**.

baseline: A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending. As specified in section 257 of the Deficit Control Act, the baseline for revenues and direct spending generally assumes that laws now in effect will continue. The baseline projections for discretionary spending reflect the discretionary spending caps set forth in that act for each fiscal year through 2002 and then grow at the rate of inflation thereafter.

basis point: A hundredth of a percentage point. For example, the difference between interest rates of 10.5 percent and 10.0 percent is 50 basis points.

Blue Chip consensus forecast: The average of about 50 economic forecasts surveyed by Capitol Publications, Inc.

budget authority: Legal authority to incur financial obligations that will result in outlays of federal government funds. Budget authority may be provided in an authorization or an appropriation act. Offsetting collections, including offsetting receipts, constitute negative budget authority.

Budget Enforcement Act of 1990 (Public Law 101-508): Title XIII of the Omnibus Budget Reconciliation Act of 1990. This act amended the Deficit Control Act to revise and extend the deficit targets through fiscal year 1995, to establish discretionary spending caps and pay-as-you-go procedures through fiscal year 1995, to conform sequestration procedures to the caps and pay-as-you-go, and to establish credit reform. This act also amended the Congressional Budget Act of 1974 to make significant changes in Congressional budget procedures. See **discretionary spending caps** and **pay-as-you-go**.

budget function: One of 20 broad categories into which federal spending and credit activities that serve similar objectives are grouped. National needs are grouped into 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. Three other functions—net interest, allowances, and undistributed offsetting receipts—are included to complete the budget.

budget resolution: A concurrent resolution, adopted by both Houses of Congress, that sets forth a Congressional budget plan for at least five years. The plan consists of spending and revenue targets and is implemented through subsequent legislation, including appropriation acts and changes in laws that affect revenues and direct spending. Such changes may be in response to reconciliation instructions included in the budget resolution. The targets established in the budget resolution are enforced through Congressional procedural mechanisms set out in the Congressional Budget Act of 1974. See **reconciliation**.

budgetary resources: All sources of budget authority that are subject to sequestration. Budgetary resources include new budget authority, unobligated balances, direct spending authority, and obligation limitations. See **sequestration**.

business cycle: Fluctuations in overall business activity accompanied by swings in the unemployment rate, interest rates, and profits. Over a business cycle, real activity rises to a peak (its highest level during the cycle), then falls until it reaches its trough (its lowest level following the peak), whereupon it starts to rise again, defining a new cycle. Business cycles are irregular, varying in frequency, magnitude, and duration. (NBER)

capacity constraints: Limits on the amount of output that can be produced without also significantly increasing prices. Causes of capacity constraints include shortages of skilled labor or of capital needed for production.

capacity utilization rate: The seasonally adjusted output of the nation's factories, mines, and electric and gas utilities expressed as a percentage of their capacity to produce output. The capacity of a facility is the greatest output it can maintain with a normal work pattern. (FRB)

capital: *Physical capital* is the stock of products set aside to support future production and consumption. In the national income and product accounts, private capital consists of business inventories, producers' durable equipment,

and residential and nonresidential structures. *Financial capital* is funds raised by governments, individuals, or businesses by incurring liabilities such as bonds, mortgages, or stock certificates. *Human capital* is the education, training, work experience, and other attributes that enhance the ability of the labor force to produce goods and services.

central bank: A government-established agency responsible for conducting monetary policy and overseeing credit conditions. The Federal Reserve System fulfills those functions in the United States.

chaebol: One of the giant business conglomerates in South Korea that tie together an extensive set of industrial and financial enterprises in a single firm.

civilian unemployment rate: Unemployment as a percentage of the civilian labor force—that is, the labor force excluding armed forces personnel. (BLS)

compensation: All income due to employees for their work during a given period. In addition to wages, salaries, bonuses, and stock options, compensation includes fringe benefits and employers' share of social insurance contributions. (BEA)

consumer confidence: An index of consumers' attitudes and buying plans. One such index is constructed by the University of Michigan Survey Research Center based on surveys of consumers' views of the state of the economy and of their personal finances, both current and prospective.

consumer durable goods: Goods bought by households for their personal use that, on average, last more than three years—such as automobiles, furniture, or appliances.

consumption: Total purchases of goods and services during a given period by households for their own use. (BEA)

CPI-U: The consumer price index for all urban consumers—an index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers during a base period. (BLS)

credit reform: A revised system of budgeting for federal credit activities that focuses on the cost of subsidies conveyed in federal credit assistance. The system was authorized by the Federal Credit Reform Act of 1990, which was part of the Budget Enforcement Act of 1990.

credit subsidy: The estimated long-term cost to the federal government of a direct loan or a loan guarantee calculated on the basis of net present value, excluding federal administrative costs and any incidental effects on governmental receipts or outlays. For direct loans, the subsidy cost is the net present value of loan disbursements minus repayments of interest and principal, adjusted for estimated defaults, prepayments, fees, penalties, and other recoveries. For loan guarantees, the subsidy cost is the net present value of the estimated payments by the government to cover defaults and delinquencies, interest subsidies, or other payments, offset by any payments to the government, including origination and other fees, penalties, and recoveries. See **present value**.

currency value: See **exchange rate**.

current-account balance: The net revenues that arise from a country's international sales and purchases of goods and services plus net international transfers (public or private gifts or donations) and net factor income (primarily capital income from foreign-located property owned by residents minus capital income from domestic property owned by nonresidents). The current-account balance differs from net exports in that it includes international transfers and net factor income. (BEA)

current dollar: A measure of spending or revenue in a given year that has not been adjusted for differences in prices between that year and a base year. See **real**.

cyclical deficit: The part of the budget deficit that results from cyclical factors rather than from underlying fiscal policy. The cyclical deficit reflects the fact that when GDP falls, revenues automatically fall and outlays automatically rise. By definition, the cyclical deficit is zero when the economy is operating at potential GDP and the unemployment rate equals the NAIRU. Compare with **standardized-employment deficit**. (CBO)

debt: Total debt issued by the federal government is referred to as *federal debt* or *gross debt*. Federal debt has two components: *debt held by the public* (federal debt held by nonfederal investors, including the Federal Reserve System) and *debt held by government accounts* (federal debt held by federal government trust funds, deposit insurance funds, and other federal accounts). *Debt subject to limit* is federal debt that is subject to a statutory limit on its issuance. The current limit applies to almost all gross debt, except a small portion of the debt issued by the Department of the Treasury and the small amount of debt issued by other federal agencies (primarily the Tennessee Valley Authority and the Postal Service).

debt service: Payment of scheduled interest obligations on outstanding debt.

deficit: The amount by which outlays exceed revenues in a given period, typically a fiscal year. A negative deficit is equivalent to a surplus. See **surplus**.

Deficit Control Act: See **Balanced Budget and Emergency Deficit Control Act of 1985**.

deflator: See **implicit deflator**.

deposit insurance: The guarantee by a federal agency that an individual depositor at a participating depository institution will receive the full amount of the deposit (up to \$100,000) if the institution becomes insolvent.

depreciation: Decline in the value of a currency, financial asset, or capital good. When applied to a capital good, depreciation usually refers to loss of value because of obsolescence or wear.

devaluation: The fall in the value of a currency that occurs when the government declares that its domestic currency will buy fewer units of a foreign currency. Such a policy involves government intervention to peg its currency (that is, fix its exchange rate). Many governments peg their domestic currencies to a stable currency, such as the U.S. dollar or the German mark. See **depreciation and exchange rate**.

direct spending: Another term for **mandatory spending**. As defined in the Deficit Control Act, as amended, direct spending comprises entitlements, the Food Stamp program, and budget authority provided by laws other than annual appropriation acts. Compare with **discretionary spending**.

discount rate: The interest rate the Federal Reserve System charges on a loan that it makes to a bank. Such loans, when allowed, enable a bank to meet its reserve requirements without reducing its loans.

discouraged workers: Jobless people who are available for work but who are not actively seeking it because they think they have poor prospects of finding jobs. Discouraged workers are not counted as part of the labor force or as being unemployed. (BLS)

discretionary spending: Spending for programs whose funding levels are determined and controlled in annual appropriation acts. Compare with **direct spending**.

discretionary spending caps: Ceilings imposed in each fiscal year through 2002 on budget authority and outlays for programs whose funding levels are determined and controlled in annual appropriation acts. Established in the Budget Enforcement Act of 1990, the ceilings were further amended in the Balanced Budget Act of 1997 to set separate caps on defense and nondefense spending through fiscal year 1999 and on violent crime reduction spending through 2000. (For a list of discretionary programs, see page 1019 of the Joint Explanatory Statement in the Conference Report on the Balanced Budget Act of 1997, H.Rept. No. 105-217.) See **discretionary spending and sequestration**.

disposable (personal) income: Income received by individuals, including transfer payments, minus personal taxes and fees paid to government. (BEA)

domestic demand: Total purchases of goods and services, regardless of origin, by U.S. consumers, businesses, and governments during a given period. Domestic demand equals gross domestic product minus net exports. (BEA)

economic profits: Profits of corporations, adjusted to remove the distortions in depreciation allowances caused by tax rules and to exclude capital gains on inventories. Economic profits represent a better measure of profits from current production than the book profits reported by corporations. (BEA)

entitlements: Programs that create a legal obligation on the federal government to make payments to any person, business, or unit of government that meets the criteria set in law. The Congress controls these programs by setting eligibility criteria and the benefit or payment rules, not by providing a specific level of funding. Although the level of spending for entitlements is determined by the number of beneficiaries who meet the eligibility criteria, funding may be provided in either the authorization or an appropriation act. The best-known entitlements are the major benefit programs, such as Social Security and Medicare. See **authorization and direct spending**.

European Monetary Union (EMU): A currency union consisting of most of the members of the European Union, who in January 1999 will align their monetary policies under a European Central Bank and adopt a common currency, the euro.

exchange rate: The number of units of a foreign currency that can be bought with one unit of the domestic currency. (FRB)

excise tax: A tax levied on the purchase of a specific type of good or service, such as tobacco products or telephone services.

expansion: A phase of the business cycle that extends from a trough to the next peak. See **business cycle**. (NBER)

federal funds: All funds that compose the federal budget except those classified by law as trust funds. See **trust fund**.

federal funds rate: Overnight interest rate at which financial institutions borrow and lend monetary reserves. A rise in the federal funds rate (compared with other short-term rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

Federal Open Market Committee (FOMC): The group within the Federal Reserve System that determines the direction of monetary policy. The open market desk at the Federal Reserve Bank of New York implements the policy with open market operations—the purchase or sale of government securities—which influence short-term interest rates and the growth of the money supply. The FOMC is composed of 12 members, including the seven members of the Board of Governors of the Federal Reserve System, the president of the Federal Reserve Bank of New York, and a rotating group of four of the other 11 presidents of the regional Federal Reserve Banks.

Federal Reserve System: As the central bank of the United States, the Federal Reserve is responsible for conducting the nation's monetary policy and overseeing credit conditions.

financing account: An account established under credit reform to handle the cash transactions of federal direct loans and loan guarantees. Under credit reform, only the subsidy cost of direct loans or loan guarantees appears in the budget. The transactions reflected in the financing accounts are considered a means of financing the deficit and, as such, are extrabudgetary. See **credit subsidy** and **means of financing**.

fiscal policy: The government's choice of tax and spending programs, which influences the amount and maturity of government debt as well as the level, composition, and distribution of national output and income. An "easy" fiscal policy stimulates the short-term growth of output and income, whereas a "tight" fiscal policy restrains their growth. Movements in the standardized-employment deficit constitute one overall indicator of the tightness or ease of federal fiscal policy; an increase relative to potential gross domestic product suggests fiscal ease, whereas a decrease suggests fiscal restriction. The President and the Congress jointly determine federal fiscal policy.

fiscal year: A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end—for example, fiscal year 1998 began October 1, 1997, and will end on September 30, 1998.

GDI: See **gross domestic income**.

GDP: See **gross domestic product**.

GDP gap: The difference between potential real GDP and actual real GDP, expressed as a percentage of potential real GDP. See **potential real GDP** and **real**.

GNP: See **gross national product**.

government-sponsored enterprises: Financial institutions established and chartered by the federal government that are privately owned and that facilitate the flow of funds to selected lending markets, such as residential mortgages and agricultural credit. Major examples are the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Banks.

grants: Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation.

grants-in-aid: Grants from the federal government to state and local governments to help provide for programs of assistance or service to the public.

gross debt: Total debt issued by the federal government. See **debt**.

gross domestic income (GDI): The sum of all income earned in the domestic production of goods and services. (BEA)

gross domestic product (GDP): The total market value of goods and services produced domestically during a given period. The components of GDP are consumption, gross domestic investment, government purchases of goods and services, and net exports. (BEA)

gross investment: A measure of additions to the capital stock that does not subtract depreciation of existing capital.

gross national product (GNP): The total market value of goods and services produced in a given period by labor and capital supplied by residents of a country, regardless of where the labor and capital are located. GNP differs from GDP primarily by including the capital income that residents earn from investments abroad and excluding the capital income that nonresidents earn from domestic investment.

implicit deflator: A measure of price for the whole economy or for a category of spending given by the ratio of current-dollar spending to real spending. See **real and current dollar**. (BEA)

industrial policy: A government policy that sets economic priorities and favors chosen industries, rather than leaving the pattern of growth and investment to the free market. Critics of industrial policies charge that they often waste resources.

inflation: Growth in a measure of the general price level, usually expressed as an annual rate of change.

infrastructure: Government-owned capital goods that provide services to the public, usually with benefits to the community at large as well as to the direct user. Examples include schools, roads, bridges, dams, harbors, and public buildings.

inventories: Stocks of goods held by businesses either for further processing or for sale. (BEA)

investment: *Physical investment* is the current product set aside during a given period to be used for future production—in other words, an addition to the stock of capital goods. As measured by the national income and product accounts, private domestic investment consists of investment in residential and nonresidential structures, producers' durable equipment, and the change in business inventories. *Financial investment* is the purchase of a financial security. *Investment in human capital* is spending on education, training, health services, and other activities that increase the productivity of the workforce. Investment in human capital is not treated as investment by the national income and product accounts.

isolationism: A policy of limiting diplomatic or economic engagement with other countries. Extreme isolationism could lead a country to withdraw from its existing international obligations and to adopt protectionist trade policies that limit economic ties with the outside world.

labor force: The number of people who have jobs or who are available for work and are actively seeking jobs. The *labor force participation rate* is the labor force as a percentage of the noninstitutional population age 16 or older. (BLS)

liquidating account: Any budgetary account established under credit reform to finance direct loan and loan guarantee activities that were obligated or committed before October 1, 1992 (the effective date of credit reform).

long-term interest rate: The interest rate earned by a note or bond that matures in 10 or more years.

lower-level substitution bias: The amount by which the growth of the CPI overstates changes in the cost of living because of how individual prices of goods and services (called entry-level items) are weighted to produce the subaggregates of the CPI. The way those items are weighted does not take into account the ability of consumers to substitute goods whose prices have increased less rapidly for goods whose prices have increased more rapidly; as a result, the CPI overstates the adverse effect of price increases on consumers' welfare. See **upper-level substitution bias**.

mandatory spending: Another term for **direct spending**.

marginal tax rate: The tax rate that applies to an additional dollar of income.

means of financing: Means by which a budget deficit is financed or a surplus is disposed of. Means of financing are not included in the budget totals. The primary means of financing is borrowing from the public. In general, the cumulative amount borrowed from the public (debt held by the public) will increase if there is a deficit and decrease if there is a surplus, although other factors can affect the amount that the government must borrow. Those other factors, known as *other means of financing*, include reductions (or increases) in the government's cash balances, seigniorage, changes in checks outstanding, changes in accrued interest costs included in the budget but not yet paid, and cash flows reflected in credit financing accounts.

means-tested programs: Programs that provide cash or services to people who meet a test of need based on income and assets. Most means-tested programs are entitlements (such as Medicaid, the Food Stamp program, Supplemental Security Income, family support, and veterans' pensions), but a few (such as subsidized housing and various social services) are funded through discretionary appropriations.

median CPI inflation rate: An alternative measure of CPI inflation. The measure is based on the inflation rates of the items that go into the consumer price index, as weighted by their respective shares of real total consumption. The median inflation rate is chosen so that half the weighted inflation rates are above the median and half are below.

monetary policy: The strategy of influencing movements of the money supply and interest rates to affect output and inflation. An "easy" monetary policy suggests faster money growth and initially lower short-term interest rates in an attempt to increase aggregate demand, but it may lead to a higher rate of inflation. A "tight" monetary policy suggests slower money growth and higher interest rates in the near term in an attempt to reduce inflationary pressure by reducing aggregate demand. The Federal Reserve System conducts monetary policy in the United States.

money supply: Private assets that can readily be used to make transactions or are easily convertible into assets that can.

NAIRU (nonaccelerating inflation rate of unemployment): The unemployment rate consistent with a constant inflation rate. An unemployment rate higher than the NAIRU indicates downward pressure on inflation, whereas an unemployment rate lower than the NAIRU indicates upward pressure on inflation. Estimates of the NAIRU are based on the historical relationship between inflation and the unemployment rate. CBO's procedures for estimating the NAIRU are described in Appendix B of *The Economic and Budget Outlook: An Update* (August 1994).

national income and product accounts (NIPAs): Official U.S. accounts that track the level and composition of GDP and how the costs of production are distributed as income. (BEA)

national saving: Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (the budget surplus or deficit—indicating dissaving—of all government entities). National saving represents all income not consumed, publicly or privately, during a given period. (BEA)

net exports: Exports of goods and services produced in a country minus its imports of goods and services produced elsewhere.

net interest: *In the federal budget*, net interest includes federal interest payments to the public as recorded in budget function 900. Net interest also includes, as an offset, interest income received by the government on loans and cash balances. *In the national income and product accounts (NIPAs)*, net interest is the income component of GDP paid as interest—primarily interest that domestic businesses pay minus interest they receive. The NIPAs include government interest payments in personal income, but such payments are not part of GDP.

net national saving: National saving minus depreciation of physical capital.

NIPAs: See **national income and product accounts**.

nominal: A measure based on current dollar value. For income or spending, the nominal level is measured in current dollars. For an interest rate, the nominal rate on debt selling at par is the current-dollar interest paid in any year as a ratio of the current-dollar value of the debt when it was issued. For debt initially issued or now selling at a discount, the nominal rate includes as a payment the estimated yearly equivalent of the difference between the redemption price and the discounted price. For an exchange rate, the nominal rate is the rate at which one nominal unit of currency trades for another. Compare with **real**.

off-budget: Spending or revenues excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds and the transactions of the Postal Service are off-budget and (except for the administrative costs of Social Security, which are discretionary) are not included in the budget resolution or in any calculations necessary under the Deficit Control Act.

offsetting receipts: Funds collected by the federal government that are recorded as negative budget authority and outlays and credited to separate receipt accounts. More than half of offsetting receipts are intragovernmental receipts that reflect agencies' payments to retirement and other funds on behalf of their employees; those receipts simply balance payments elsewhere in the budget. Proprietary receipts are offsetting receipts that come to the federal government from the public, generally as a result of voluntary, business-type transactions. Examples of proprietary receipts are premiums for Supplementary Medical Insurance (Part B of Medicare), receipts from timber and oil leases, and proceeds from the sale of electric power.

Omnibus Budget Reconciliation Act of 1993 (Public Law 103-66): This act carried out the reconciliation instructions contained in the budget resolution for fiscal years 1994 through 1998. Title XIV of the act amended the Deficit Control Act by extending the discretionary spending caps, pay-as-you-go procedures, and sequestration procedures through fiscal year 1998. The act did not extend deficit targets beyond fiscal year 1995. See **reconciliation**, **discretionary spending caps**, and **pay-as-you-go**.

other means of financing: See **means of financing**.

outlays: Expenditures made to fulfill a federal obligation, generally by issuing a check or disbursing cash. Offsetting collections, including offsetting receipts, constitute negative outlays. Outlays may pay for obligations incurred in previous fiscal years or in the current year. Outlays, therefore, flow in part from unexpended balances of prior year budget authority and in part from budget authority provided for the current year. Unlike outlays for other categories of spending, outlays for interest on the public debt are counted when the interest is earned, not when it is paid. Also, outlays for direct loans and loan guarantees made since fiscal year 1992 reflect the estimated subsidy costs instead of cash transactions.

pay-as-you-go (PAYGO): A procedure that tracks the five-year budgetary effects of all enacted legislation affecting direct spending or receipts and that triggers a sequestration if the legislation would increase the deficit or reduce the surplus in a fiscal year. The procedure was established in the Budget Enforcement Act of 1990 and was extended in the Balanced Budget Act of 1997 for laws enacted through fiscal year 2002. See **sequestration**.

peak: See **business cycle**.

personal saving: Saving by households. Personal saving equals disposable personal income minus spending for consumption and interest payments. The *personal saving rate* is personal saving as a percentage of disposable personal income. (BEA)

potential real GDP: The highest level of real gross domestic product that could persist for a substantial period without raising the rate of inflation. CBO calculates potential real GDP by relating it to the nonaccelerating inflation rate of unemployment (NAIRU), a rate that is consistent with a constant inflation rate. (CBO)

present value: A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The calculation of present value depends on the rate of interest. For example, given an interest rate of 5 percent, 95 cents today will grow to \$1 next year. Hence, the present value of \$1 payable a year from today is only 95 cents.

private saving: Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits minus dividends paid. (BEA)

producers' durable equipment: Fixed capital equipment owned by businesses—primarily capital such as computers, machines, and transportation equipment. (BEA)

productivity: Average real output per unit of input. *Labor productivity* is average real output per hour of labor. The growth of labor productivity is defined as the growth of real output that is not explained by the growth of labor input alone. *Total factor productivity* is average real output per unit of combined labor and capital inputs. The growth of total factor productivity is defined as the growth of real output that is not explained by the growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker raise labor productivity but not total factor productivity. (BLS)

program account: Any budgetary account that finances credit subsidies and the costs of administering credit programs.

real: Adjusted to remove the effects of inflation. *Real output* represents the quantity, rather than the dollar value, of goods and services produced. *Real income* represents the power to purchase real output. *Real data* at the finest level of disaggregation are constructed by dividing the corresponding nominal data, such as spending or wage rates, by a price index. Real aggregates, such as *real GDP*, are constructed by a procedure that allows the real growth of the aggregate to reflect the real growth of its components, appropriately weighted by the importance of the components. A *real interest rate* is a nominal interest rate adjusted for expected inflation; it is often approximated by subtracting an estimate of the expected inflation rate from the nominal interest rate. Compare with **nominal** and **current dollar**.

rebenchmarking: An update of the benchmark period for an overall index or aggregate. Rebenchmarking assigns new weights to the items that make up the total. The new weights represent the spending on each item in the new base period as a share of total spending on such items in that period. In 1998, the CPI will be rebenchmarking by assigning weights that reflect the spending shares over the 1993-1995 period rather than over the 1982-1984 period.

receipt account: Any account that is established exclusively to record the collection of income, including negative subsidies. In general, receipt accounts that collect money arising from the exercise of the government's sovereign powers are included as revenues, whereas the proceeds of intragovernmental transactions or collections from the public arising from business-type transactions (such as interest income, proceeds from the sale of property or products, or profits from federal credit activities) are included as offsetting receipts—that is, credited as offsets to outlays rather than included in revenues.

recession: A phase of the business cycle extending from a peak to the next trough—usually lasting six months to a year—and characterized by widespread declines in output, income, employment, and trade in many sectors of the economy. Real GDP usually falls throughout a recession. See **business cycle**. (NBER)

reconciliation: A special legislative procedure established under the Congressional Budget Act of 1974 by which the Congress changes existing laws that affect revenues or direct spending to conform to the revenue and spending targets established in the budget resolution. The budget resolution may contain *reconciliation instructions*, which direct Congressional committees to make changes in revenue or direct spending programs under their jurisdiction to achieve a specified budgetary result. The legislation to implement the instructions is usually combined into one comprehensive *reconciliation bill*. Reconciliation affects revenues, direct spending, and offsetting receipts, but usually not discretionary spending. See **budget resolution**.

recovery: A phase of the business cycle that lasts from a trough until overall economic activity returns to the level it reached at the previous peak. See **business cycle**. (NBER)

residential investment: Investment in housing, primarily the construction of new single-family and multifamily housing and alterations plus additions to existing housing. (BEA)

revenues: Funds collected from the public arising from the sovereign power of the government. Federal revenues consist of receipts from income taxes (individual and corporate), excise taxes, and estate and gift taxes; social insurance contributions; customs duties; fees and fines; and miscellaneous receipts, such as Federal Reserve earnings, gifts, and contributions. Federal revenues are also known as federal governmental receipts but do not include offsetting receipts, which are recorded as negative budget authority and outlays.

saving rate: See **personal saving**.

seigniorage: The gain to the government from the difference between the face value of minted coins put into circulation and the cost of producing them (including the cost of the metal used in the coins). Seigniorage is considered a means of financing and is not included in the budget totals. See **means of financing**.

sequestration: The cancellation of budgetary resources to enforce the discretionary spending caps and pay-as-you-go procedures established in the Budget Enforcement Act of 1990 and most recently extended by the Balanced Budget Act of 1997. Sequestration is triggered if the Office of Management and Budget determines that enacted discretionary appropriations exceed the discretionary spending caps or that enacted legislation affecting direct spending and receipts increases the deficit or reduces the surplus. Changes in direct spending and receipts that increase the deficit or reduce the surplus would result in reductions in direct spending not otherwise exempted by law. Discretionary spending in excess of the caps would cause the cancellation of budgetary resources within the discretionary spending category. See **discretionary spending caps** and **pay-as-you-go**.

short-term interest rate: The interest rate earned by a debt instrument (such as a Treasury bill) that will mature within one year.

standardized-employment deficit: The level of the federal budget deficit that would occur under current law if the economy operated at potential GDP. The standardized-employment deficit provides a measure of underlying fiscal policy by removing the influence of cyclical factors from the budget deficit. Compare with **cyclical deficit**. (CBO)

structural deficit: Same as **standardized-employment deficit**.

subsidy cost: See **credit subsidy**.

surplus: The amount by which revenues exceed outlays in a given period, typically a fiscal year. A negative surplus is equivalent to a deficit. See **deficit**.

ten-year Treasury note: An interest-bearing note issued by the U.S. Treasury that is to be redeemed in 10 years.

three-month Treasury bill: An interest-bearing security issued by the U.S. Treasury that is to be redeemed in 91 days.

thrift institutions: Savings and loan institutions and mutual savings banks.

total factor productivity: See **productivity**.

transfer payments: Payments in return for which no good or service is currently received, such as welfare or Social Security payments or money sent to relatives abroad. (BEA)

trough: See **business cycle**.

trust fund: A fund, designated as a trust fund by law, that is credited with income from earmarked collections and charged with certain outlays. Collections may come from the public (for example, from taxes or user charges) or from intrabudgetary transfers. The federal government has more than 150 trust funds. The largest and best known finance major benefit programs (including Social Security and Medicare) and infrastructure spending (the Highway and the Airport and Airway Trust Funds). See **federal funds**.

underlying rate of inflation: The rate of inflation of a modified CPI-U that excludes from the market basket the components most volatile in price: food, energy, and used cars.

unemployment: Joblessness. The measure of unemployment is the number of jobless people who are available for work and are actively seeking jobs. The *unemployment rate* is unemployment as a percentage of the labor force. (BLS)

unemployment gap: The difference between the nonaccelerating inflation rate of unemployment (NAIRU) and the unemployment rate. See **NAIRU**.

upper-level substitution bias: The amount by which the growth of the CPI overstates changes in the cost of living because of how the approximately 200 subaggregates (called strata) are weighted to produce the overall CPI. The way those subaggregates are weighted does not take into account the ability of consumers to substitute goods whose prices have increased less rapidly for goods whose prices have increased more rapidly; as a result, the CPI overstates the adverse effect of price increases on consumers' welfare. See **lower-level substitution bias**.

yield: The average annual rate of return on a security, including interest payments and repayment of principal, if it is held to maturity.

yield curve: The relationship formed by plotting the yields of otherwise comparable fixed-income securities against their terms of maturity. Typically, yields increase as maturities lengthen. The rate of that increase determines the "steepness" or "flatness" of the yield curve. Ordinarily, a steepening (or flattening) of the yield curve is taken to suggest that short-term interest rates are expected to rise (or fall).